

10/757148

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STRUCTURE FILE UPDATES: 17 MAY 2006 HIGHEST RN 884739-24-6
DICTIONARY FILE UPDATES: 17 MAY 2006 HIGHEST RN 884739-24-6

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*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

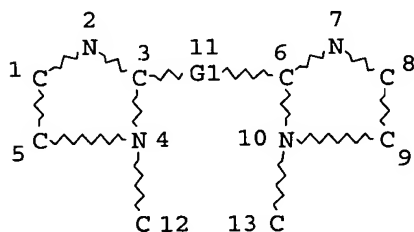
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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
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<http://www.cas.org/ONLINE/UG/regprops.html>

L1 331064 S ?NICKEL?/CNS

L2 STR



REP G1=(1-3) C
NODE ATTRIBUTES:
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 7
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED

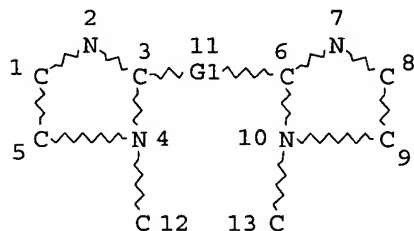
10/757148

NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L3 (478)SEA FILE=REGISTRY SSS FUL L2

L4 STR



REP G1=(1-3) C

NODE ATTRIBUTES:

CONNECT IS X2 RC AT 2

CONNECT IS X2 RC AT 7

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L5 281 SEA FILE=REGISTRY SUB=L3 SSS FUL L4

100.0% PROCESSED 281 ITERATIONS

281 ANSWERS

SEARCH TIME: 00.00.01

L12 100000 S L1 RAN=(187236-37-9,)

L13 231065 S L1 RAN=(,187236-37-9)

FILE 'CAPLUS' ENTERED AT 14:51:33 ON 18 MAY 2006

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FILE COVERS 1907 - 18 May 2006 VOL 144 ISS 21

FILE LAST UPDATED: 17 May 2006 (20060517/ED)

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L14 35444 S L12
 L15 751158 S L13
 L16 10 S L5 AND (L14 OR L15 OR NI OR NICKEL)

L16 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:902904 CAPLUS

DOCUMENT NUMBER: 143:240815

TITLE: Crowned dithiocarbamate metal complexes and methods for their use

INVENTOR(S): Liu, Shuang; He, Zhengjie

PATENT ASSIGNEE(S): Purdue Research Foundation, USA

SOURCE: PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005077962	A2	20050825	WO 2005-US4872	20050210
WO 2005077962	A3	20051215		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, SM

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-543176P P 20040210

OTHER SOURCE(S): MARPAT 143:240815

AB This invention claims Compns. containing transition metal complexes of crown ether derivs. of dithiocarbamates and methods of using these compns.; neutral and cationic radioactive metal-nitrido complexes of crowned dithiocarbamates (DTCs) and methods of using these complexes as radiopharmaceuticals for diagnosis and treatment of cardiovascular disorders, infectious diseases, and cancer. Also claimed tripodal chelator transition metal complexes with crown ether derivs. of dithiocarbamates and methods of using these complexes for treating diseases such as those characterized by nitric oxide overprodn. Also methods of using crowned DTCs for heavy metal detoxification are described. For example, 99mTcNL2 (HL = dithiocarbamic acid of 1-aza-15-crown-5) was prepared in 95% yield by the reaction of a solution containing PDTA and succinic dihydrazide with pertechnetate-99mTc and NaL.

IT **7440-02-ODP, Nickel**, tripodal chelator or crown-ether-derivative dithiocarbamate complexes **86119-45-1DP**, transition metal complexes **862982-87-4DP**, transition metal complexes

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation for treatment of diseases from nitric oxide overprodn. or reactive oxygen species or metal poisoning)

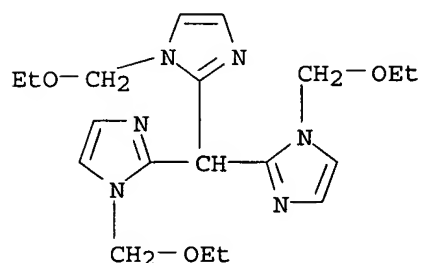
RN 7440-02-0 CAPLUS

CN Nickel (8CI, 9CI) (CA INDEX NAME)

Ni

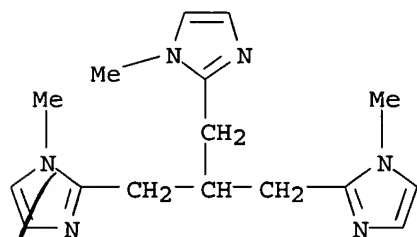
RN 86119-45-1 CAPLUS

CN 1H-Imidazole, 2,2',2''-methylidynetris[1-(ethoxymethyl)- (9CI) (CA INDEX NAME)



RN 862982-87-4 CAPLUS

CN 1H-Imidazole, 2,2'-[2-[(1-methyl-1H-imidazol-2-yl)methyl]-1,3-propanediyl]bis[1-methyl- (9CI) (CA INDEX NAME)



L16 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:965668 CAPLUS

DOCUMENT NUMBER: 142:113681

TITLE: Bidentate amidine ligands for nickel
(0)-mediated coupling of carbon dioxide with unsaturated hydrocarbons

AUTHOR(S): Aoki, Masao; Kaneko, Motomu; Izumi, Sawa; Ukai, Kazutoshi; Iwasawa, Nobuharu

CORPORATE SOURCE: Department of Chemistry, Tokyo Institute of Technology, Tokyo, 152-8551, Japan

SOURCE: Chemical Communications (Cambridge, United Kingdom) (2004), (22), 2568-2569

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:113681

AB Novel bidentate amidines were designed and synthesized as easily available electron-donating N-ligands for Ni0-mediated coupling of carbon dioxide with alkynes or allenes, and high regioselectivity was achieved even for the carboxylation of aryl substituted internal alkynes.

IT 1295-35-8, Dicyclooctadienenickel

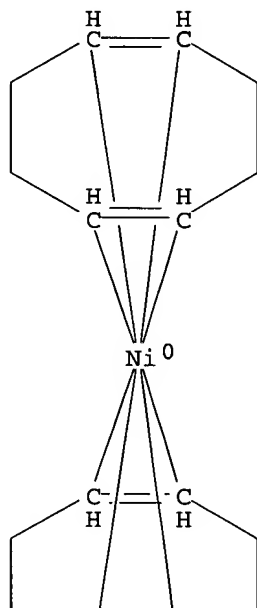
10/757148

RL: CAT (Catalyst use); USES (Uses)
(bidentate amidine ligands for **nickel**(0)-mediated
coupling of carbon dioxide with unsatd. hydrocarbons)

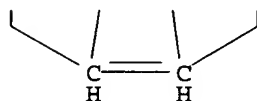
RN 1295-35-8 CAPLUS

CN Nickel, bis[(1,2,5,6- η)-1,5-cyclooctadiene]- (9CI) (CA INDEX
NAME)

PAGE 1-A



PAGE 2-A

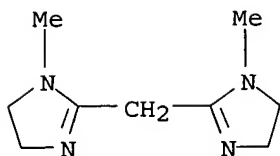


IT 821005-05-4P

RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation);
PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(bidentate amidine ligands for **nickel**(0)-mediated
coupling of carbon dioxide with unsatd. hydrocarbons)

RN 821005-05-4 CAPLUS

CN 1H-Imidazole, 2,2'-methylenebis[4,5-dihydro-1-methyl- (9CI) (CA INDEX
NAME)



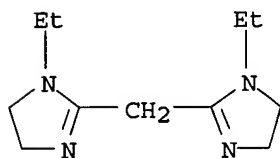
IT 821005-07-6P 821005-09-8P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(bidentate amidine ligands for **nickel**(0)-mediated coupling of carbon dioxide with unsatd. hydrocarbons)

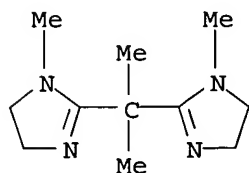
RN 821005-07-6 CAPLUS

CN 1H-Imidazole, 2,2'-methylenebis[1-ethyl-4,5-dihydro- (9CI) (CA INDEX NAME)



RN 821005-09-8 CAPLUS

CN 1H-Imidazole, 2,2'-(1-methylethylidene)bis[4,5-dihydro-1-methyl- (9CI) (CA INDEX NAME)



IT 821005-04-3P 821005-06-5P

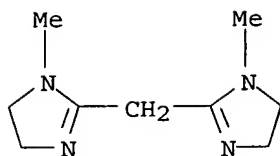
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(bidentate amidine ligands for **nickel**(0)-mediated coupling of carbon dioxide with unsatd. hydrocarbons)

RN 821005-04-3 CAPLUS

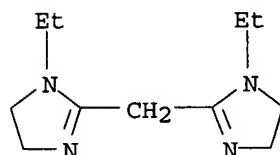
CN 1H-Imidazole, 2,2'-methylenebis[4,5-dihydro-1-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

10/757148



● HCl

RN 821005-06-5 CAPLUS
CN 1H-Imidazole, 2,2'-methylenebis[1-ethyl-4,5-dihydro-,
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L16 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:584476 CAPLUS

DOCUMENT NUMBER: 141:140167

TITLE: Method for preparing Suzuki coupling compounds, in
particular alkylarenes, in the presence of a base
and a catalytic system comprising a Ni
compound and a bisimidazolium derivative

INVENTOR(S): Itahashi, Tamon; Kamikawa, Takashi

PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

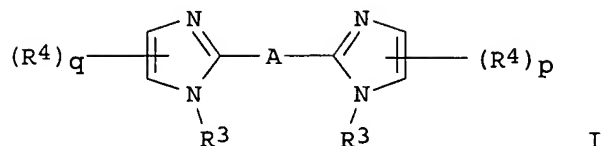
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1439157	A2	20040721	EP 2004-250196	20040115
EP 1439157	A3	20041020		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004269486	A2	20040930	JP 2003-111282	20030416
US 2004161404	A1	20040819	US 2004-757148	20040114
PRIORITY APPLN. INFO.:			JP 2003-9637	A 20030117

Searcher : Shears 571-272-2528

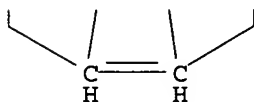
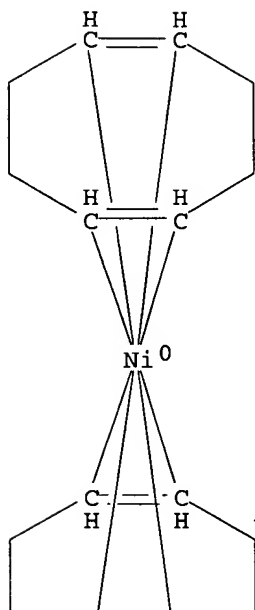
OTHER SOURCE(S) : MARPAT 141:140167
GI



AB The invention is directed to a method for producing a cross-coupling compound of formula $Y a R_1 R_2 (R_1)_b$ by Suzuki cross-coupling of an organic halide of formula $n' (R_1 X_1)_n$ with a boron compound of formula $m [R_2 (B X_2)_2]_n$ in the presence of a base and a catalytic system comprising a Ni compound and a bisimidazolium compound I [wherein R_1 = (un)substituted linear, branched, or cyclic hydrocarbyl; a, b = independently 1 or 2; provided that when $n = n'$, both n and n' are not 2; R_2 = (un)substituted hetero/aryl, alkenyl; $Y = R_2, X_1$; $X_1 = Cl, Br, I$; carbon atoms at the α and β positions relative to X_1 in the halide are sp^3 carbons; $X_2 =$ independently OH and derivs., or $X_{22} =$ alkylenedioxy or arylenedioxy; $m = 1-2$; $m \leq n$; $R_3 =$ (un)substituted alkyl; $R_4 = H, (un)substituted alkyl$; $A = (CH_2)_1$; $l = 1-3$; $p, q =$ independently 0-2]. The method eliminates the use of expensive Pd phosphine complexes. Ni compds. include Ni salts and π -complexes of zero-valent or divalent Ni. Thus, Suzuki cross-coupling of p-methoxyphenylboronic acid with 1-bromooctane in the presence of K_3PO_4 /bis(1,5-cyclooctadiene)nickel/bis(N-methylimidazol-2-yl)methane in an argon atmosphere at 80° for 2 h gave 4-octylanisole in 87% yield.

IT 1295-35-8, Bis(1,5-cyclooctadiene)nickel
7440-02-0D, Nickel, salts 7791-20-0,
Nickel chloride hexahydrate 124225-99-6,
Bis(N-methylimidazol-2-yl)methane
RL: CAT (Catalyst use); USES (Uses)
(catalytic system component; method for preparing Suzuki coupling compds., in particular alkylarenes, in the presence of a base and a catalytic system comprising a Ni compound and a bisimidazolium derivative)

RN 1295-35-8 CAPLUS
CN Nickel, bis[(1,2,5,6- η)-1,5-cyclooctadiene]- (9CI) (CA INDEX NAME)



RN 7440-02-0 CAPLUS
 CN Nickel (8CI, 9CI) (CA INDEX NAME)

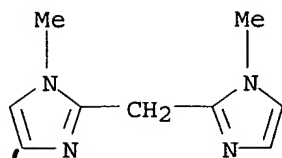
Ni

RN 7791-20-0 CAPLUS
 CN Nickel chloride (NiCl₂), hexahydrate (8CI, 9CI) (CA INDEX NAME)

Cl-Ni-Cl

●6 H₂O

RN 124225-99-6 CAPLUS
 CN 1H-Imidazole, 2,2'-methylenebis[1-methyl- (9CI) (CA INDEX NAME)



L16 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:893732 CAPLUS

DOCUMENT NUMBER: 134:266373

TITLE: Cooperativity of binuclear Zn(II) complexes of bisimidazolyl ligands in the hydrolysis of bis(2,4-dinitrophenyl) phosphate in aqueous solution

AUTHOR(S): Kondo, Shin-ichi; Shinbo, Koichi; Yamaguchi, Tatsuya; Yoshida, Kitaro; Yano, Yumihiko

CORPORATE SOURCE: Department of Chemistry, Gunma University, Kiryu, Gunma, 376-8515, Japan

SOURCE: Journal of the Chemical Society, Perkin Transactions 2 (2001), (1), 128-131

CODEN: JCSPGI; ISSN: 1472-779X

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:266373

AB Hydrolysis of bis(2,4-dinitrophenyl) phosphate (BDNPP) by Zn(II) with ligands bearing plural bis(imidazol-2-yl) groups was kinetically studied in aqueous solution. The binuclear Zn(II) complex of 1,3-bis(diimidazol-2-ylhydroxymethyl)benzene (2a) is most effective for hydrolysis of BDNPP (1.2 + 10³-fold). ESI-MS study revealed formation of 2a·Zn(II)₂ in MeOH-H₂O, suggesting that the rate acceleration is due to so called double Lewis acid activation. The pH-rate profile showed that the pK_a of the active species is approx. 7.5. The rate accelerations by the complexes of 2a with other metal ions were 4.3-fold for Ni(II), 7.1-fold for Co(II), and 1.9 + 10²-fold for La(III).

IT 79507-69-0 131154-61-5 151776-08-8

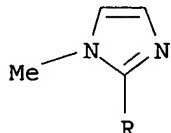
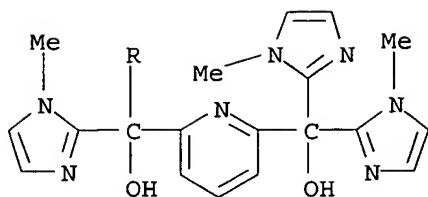
RL: CAT (Catalyst use); PRP (Properties); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(kinetics of hydrolysis of bis(dinitrophenyl) phosphate in the presence of)

RN 79507-69-0 CAPLUS

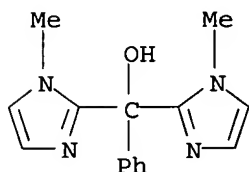
CN 2,6-Pyridinedimethanol, $\alpha,\alpha,\alpha',\alpha'$ -tetrakis(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)

10/757148



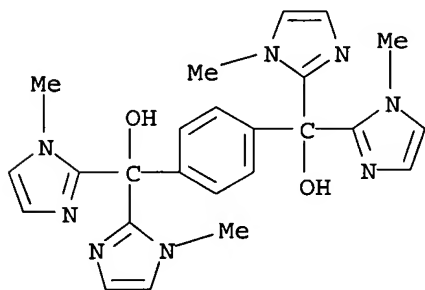
RN 131154-61-5 CAPLUS

CN 1H-Imidazole-2-methanol, 1-methyl- α -(1-methyl-1H-imidazol-2-yl)- α -phenyl- (9CI) (CA INDEX NAME)



RN 151776-08-8 CAPLUS

CN 1,4-Benzenedimethanol, $\alpha, \alpha, \alpha', \alpha'$ -tetrakis(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)



IT 79507-68-9DP, zinc binuclear and mononuclear complexes

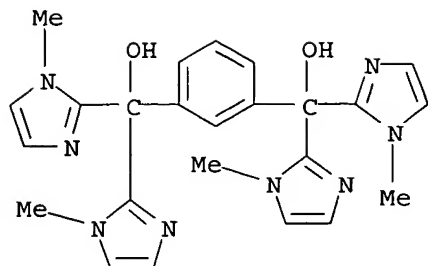
331994-24-2DP, zinc binuclear and mononuclear complexes

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(preparation and kinetics of hydrolysis of bis(dinitrophenyl) phosphate in the presence of)

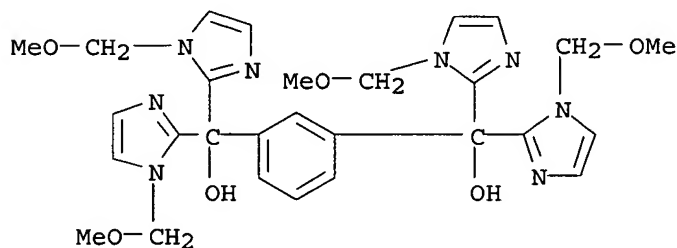
RN 79507-68-9 CAPLUS

CN 1,3-Benzenedimethanol, $\alpha, \alpha, \alpha', \alpha'$ -tetrakis(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)



RN 331994-24-2 CAPLUS

CN 1,3-Benzenedimethanol, $\alpha,\alpha,\alpha',\alpha'$ -tetrakis[1-(methoxymethyl)-1H-imidazol-2-yl]- (9CI) (CA INDEX NAME)



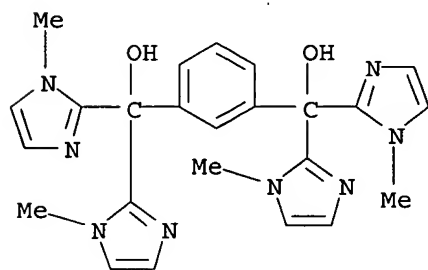
IT 79507-68-9

RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent);
USES (Uses)

(preparation, metal binding ability and rate consts. for hydrolysis of bis(dinitrophenyl) phosphate in the presence of zinc and)

RN 79507-68-9 CAPLUS

CN 1,3-Benzenedimethanol, $\alpha,\alpha,\alpha',\alpha'$ -tetrakis(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)



IT 331994-23-1P 331994-24-2P 331994-25-3P
331994-26-4P

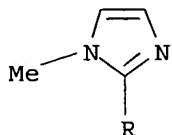
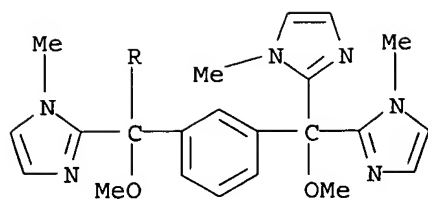
RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation);
PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation, metal binding ability and rate consts. for hydrolysis of bis(dinitrophenyl) phosphate in the presence of zinc and)

RN 331994-23-1 CAPLUS

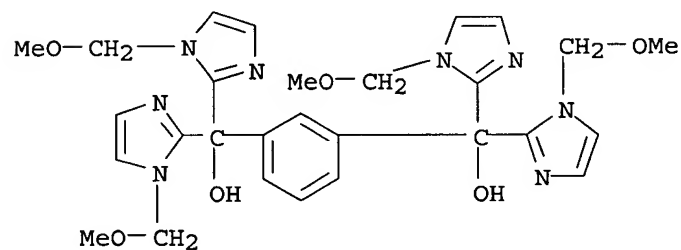
CN 1H-Imidazole, 2,2',2'',2'''-[1,3-phenylenebis(methoxymethylidene)]tetraakis[1-methyl- (9CI) (CA INDEX NAME)

10/757148



RN 331994-24-2 CAPLUS

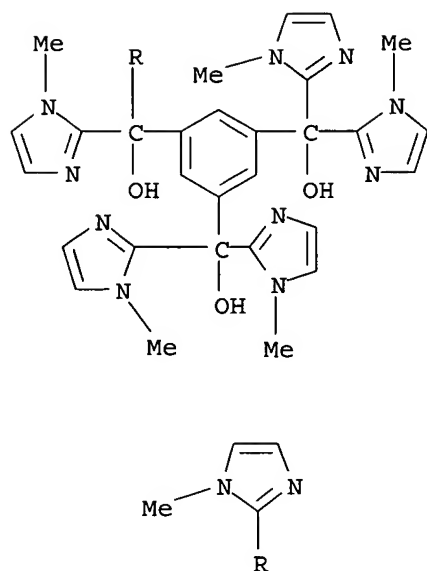
CN 1,3-Benzenedimethanol, $\alpha, \alpha, \alpha', \alpha'$ -tetrakis[1-(methoxymethyl)-1H-imidazol-2-yl]- (9CI) (CA INDEX NAME)



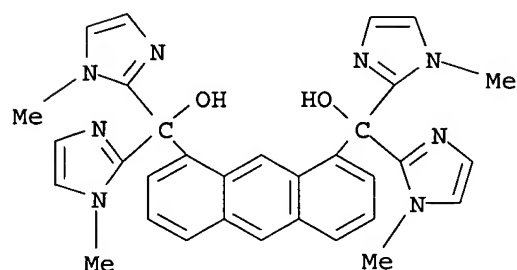
RN 331994-25-3 CAPLUS

CN 1,3,5-Benzenetrimethanol, $\alpha, \alpha, \alpha', \alpha', \alpha'', \alpha''$ -hexakis(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)

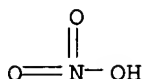
10/757148



RN 331994-26-4 CAPLUS
CN 1,8-Anthracenedimethanol, $\alpha, \alpha, \alpha', \alpha'$ -tetrakis(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)



IT 13478-00-7, **Nickel** dinitrate hexahydrate
RL: CAT (Catalyst use); PRP (Properties); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(reaction with bisimidazolyl ligands and their effect on the hydrolysis of bis(dinitrophenyl) phosphate in aqueous solution)
RN 13478-00-7 CAPLUS
CN Nitric acid, nickel(2+) salt, hexahydrate (8CI, 9CI) (CA INDEX NAME)



● 1/2 Ni(II)

● 3 H₂O

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1994:620265 CAPLUS
 DOCUMENT NUMBER: 121:220265
 TITLE: High relaxivity, paramagnetic, metal complexes for magnetic resonance imaging
 INVENTOR(S): Beaty, Julie A.; Deutsch, Edward A.; Nosco, Dennis L.
 PATENT ASSIGNEE(S): Mallinckrodt Medical, Inc., USA
 SOURCE: PCT Int. Appl., 18 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9410182	A1	19940511	WO 1993-US10595	19931105
W: AU, BR, CA, CZ, FI, HU, JP, KR, NO, PL, SK				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5364953	A	19941115	US 1992-971789	19921105
AU 9462807	A1	19940524	AU 1994-62807	19931105
PRIORITY APPLN. INFO.:			US 1992-971789	A 19921105
			WO 1993-US10595	W 19931105

AB The present invention relates to novel compds. for use as imaging agents. In particular, the present invention relates to paramagnetic metal clusters having O and/or N containing ligands useful as contrast agents for magnetic resonance imaging (MRI). Thus, MObLdQzYx (M = Cr, Mn, Fe, Co, Ni, Cu, Pr, Nd, Sm, Y, Gd, Tb, Dy, Ho, Er; b = 0-12; Q = mono- or poly-, alkoxy, carboxylate, sulfonate, boronate, phosphonate; z = 2-16' L = derivs. of phenanthroline or bipyridine, py, 2,2'-bis(1-methylimidazolyl)phenylmethoxymethane; d = 0-12; Y and L may be the same or different; x = 0-12) were claimed. Thus [Mn3(OAc)6L2] (L = 1,10-phenanthroline, 2,2'-bipyridine) and [Mn3(OBz)6L2] were prepared

IT 7440-02-ODP, Nickel, diimine or pyridine or imidazolylmethane complexes 123594-47-8DP, 2,2'-Bis(1-methylimidazolyl)phenylmethoxymethane), rare earth and transition metal complexes

10/757148

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as NMR imaging agent)

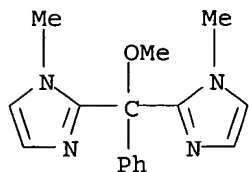
RN 7440-02-0 CAPLUS

CN Nickel (8CI, 9CI) (CA INDEX NAME)

Ni

RN 123594-47-8 CAPLUS

CN 1H-Imidazole, 2,2'-(methoxyphenylmethylene)bis[1-methyl- (9CI) (CA INDEX NAME)



L16 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:314189 CAPLUS

DOCUMENT NUMBER: 120:314189

TITLE: Calixresorcinarenes as Ligands: Synthesis and Characterization of Transition-Metal Cavitand Complexes

AUTHOR(S): Sorrell, Thomas N.; Pigge, F. Christopher; White, Peter S.

CORPORATE SOURCE: Department of Chemistry, University of North Carolina at Chapel Hill, Chapel Hill, NC, 27599-3290, USA

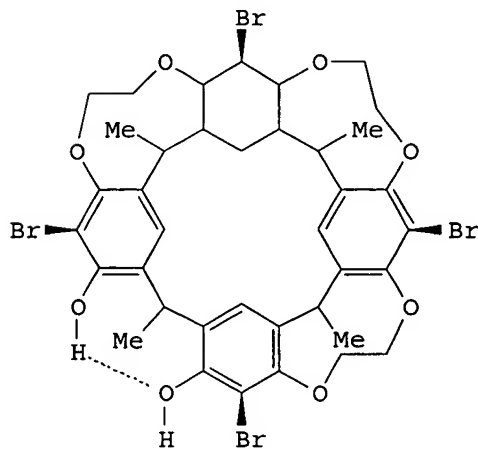
SOURCE: Inorganic Chemistry (1994), 33(4), 632-5

CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB A partially-unlinked cavitand I, derived from the condensation of acetaldehyde and resorcinol and having 3 ethylene bridges, functions as a monodentate ligand toward transition metal ions. Treatment of the cavitand with MCl_2 and a bidentate ligand (L) in the presence of NaOH gave metal complexes with the formula $(cavitand)_2ML$ ($M = Co, Cu, Zn$) or $(cavitand)_2ML_2$ ($M = Ni$). The square-planar complexes of $Cu(II)$ and $Co(II)$, the tetrahedral complex of $Zn(II)$, and the octahedral complex of $Ni(II)$ were characterized spectroscopically and in 1 case by x-ray crystallog. Crystals of $Cu[Br_4Cav]_2(bime)$ ($bime = 1,1-bis(1-methylimidazol-2-yl)-1-methoxyethane$) belong to the triclinic space group $P_{\bar{1}}$ with a 13.854(3), b 21.602(5), c 22.743(6) Å, α 110.091(21), β 98.540(22), γ 103.922(21)°, and $Z = 2$.

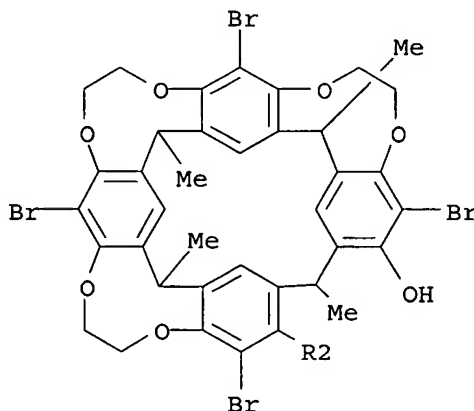
IT 154624-71-2P

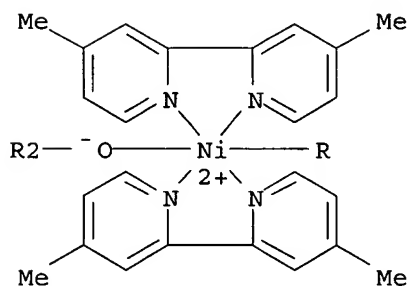
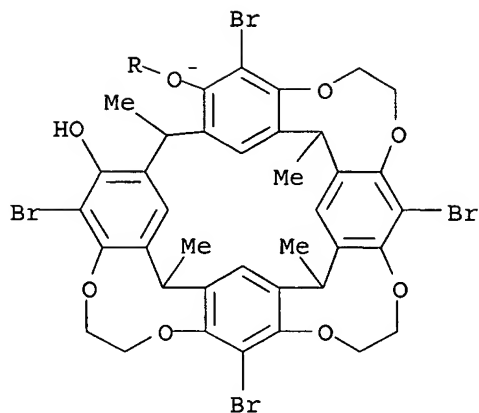
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 154624-71-2 CAPLUS

CN Nickel, bis(4,4'-dimethyl-2,2'-bipyridine-N,N')bis(4,9,14,19-tetrabromo-6,7,11,12,16,17-hexahydro-23,25,27,28-tetramethyl-2,21-methano-23H,25H,27H-dibenzo[e,e'] [1,4]dioxonino[6,5-j:8,9-j']bis[1,4]benzodioxonin-3,20-diolato-O3)-, stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A



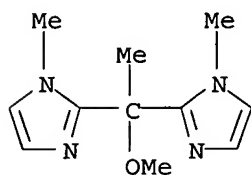


IT 154061-59-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with copper chloride and calixresorcinarene)

RN 154061-59-3 CAPLUS

CN 1H-Imidazole, 2,2'-(1-methoxyethylidene)bis[1-methyl- (9CI) (CA INDEX NAME)



L16 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:67857 CAPLUS

DOCUMENT NUMBER: 120:67857

TITLE: Interaction of binuclear transition metal complexes with DNA

AUTHOR(S): Kesicki, Edward A.; DeRosch, Mark A.; Freeman, Laurie H.; Walton, Christine L.; Harvey, Daniel

F.; Trogler, William C.
 CORPORATE SOURCE: Dep. Chem., Univ. California, San Diego, La Jolla,
 CA, 92093-0506, USA
 SOURCE: Inorganic Chemistry (1993), 32(25), 5851-67
 CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal

LANGUAGE: English

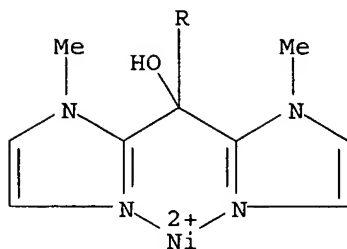
AB Binucleating tetrakis(methylimidazole) ligands (MeIm)₂C(OH)-spacer-C(OH)(MeIm)₂ were prepared, where MeIm = 1-methylimidazol-2-yl and the spacer were 1 of several different rigid (5 = 1,4-C₆H₄, 6 = trans-C₂H₂, 14 = (2 α ,3 α β ,5 α ,6 α β)-octahydro-3a,6a-dimethylpentalene, 15 = (2 α ,3 α α ,5 α ,6 α α)-octahydro-3a,6a-dimethylpentalene, 16 = (2 α ,3 α α ,5 β ,6 α α)-octahydro-3a,6a-dimethylpentalene) or flexible ((CH₂)_n, 7, n = 0; 8, n = 1; 9, n = 2; 10, n = 3; 11, n = 8) spacers. A highly rigid binucleating ligand, (3 α α ,6 α α)-octahydro-2,5-bis(bis(1-methylimidazol-2-yl)methylene)-3a,6a-dimethylpentalene (17), was prepared and characterized. The effectiveness of the rigid binuclear complexes of Cu(II), Ni(II), and Zn(II) as catalysts for the hydrolysis of the phosphate diester Na bis(4-nitrophenyl) phosphate was similar to corresponding mononuclear complexes with ligand 4 = (MeIm)₂C(OH)Me or bipyridine. A significant DNA binding ability was observed for the binuclear complexes, which was not evident with the mononuclear compds. In gel electrophoresis mobility studies, the cationic dimetal complexes with the tetrakis(methylimidazole) ligands retarded the migration of supercoiled plasmid DNA. The binucleating ligands with flexible organic spacer groups and the mononuclear metal complexes did not show this effect. In ultrafiltration expts. with T-labeled ligands, all the cationic dimetal complexes showed evidence for DNA binding, whereas the mononuclear complexes of 4 did not. Similar results were obtained for DNA precipitation studies. Without added metal ions, none of the ligands evidenced a significant DNA binding ability. Simple amine polycations and mononuclear cations, such as Mg(II), were not able to disrupt the binding of the binuclear complexes to DNA, unless added in a large excess. Ni(II) complexes that contained 7, 9, and 15 were crystallized and characterized by x-ray crystallog. The Zn(II) complexes present in solution with 4, 14, and 15 were studied by ¹H NMR spectroscopy. Reasons for the enhanced binding ability of dimetal complexes to DNA and the role of a flexible or rigid spacer group are discussed.

IT 152069-71-1 152101-06-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (formation and DNA binding and phosphate diester hydrolysis in presence of)

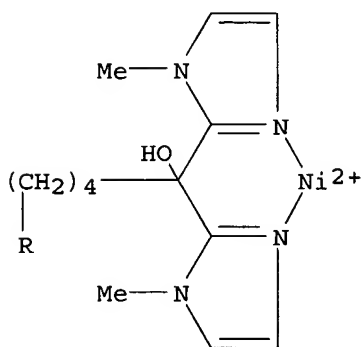
RN 152069-71-1 CAPLUS

CN Nickel(4+), [μ -[1,1,6,6-tetrakis(1-methyl-1H-imidazol-2-yl)-1,6-hexanediol]]di- (9CI) (CA INDEX NAME)

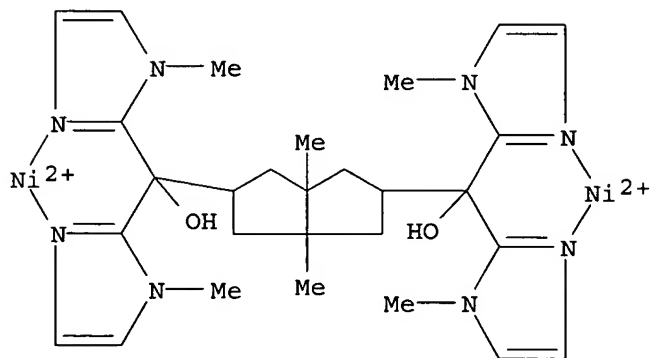
PAGE 1-A



PAGE 2-A



RN 152101-06-9 CAPLUS
 CN Nickel(4+), [μ-[octahydro-3a,6a-dimethyl-
 α,α,α',α'-tetrakis(1-methyl-1H-imidazol-2-yl)-
 2,5-pentalenedimethanol]]di-, (2α,3αβ,5α,6αβ)-
 (9CI) (CA INDEX NAME)

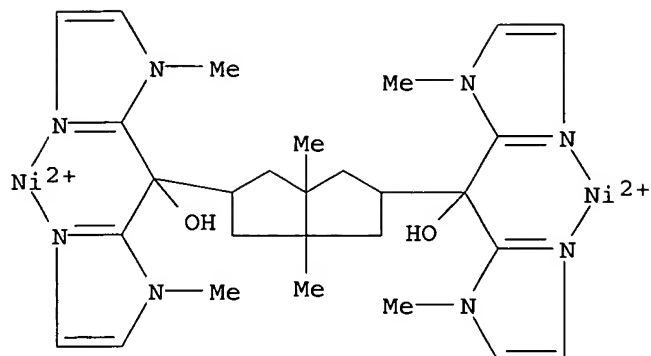


IT 152069-68-6P 152069-69-7P 152069-74-4P
 152069-76-6P

RL: PREP (Preparation)
 (formation and DNA binding by)

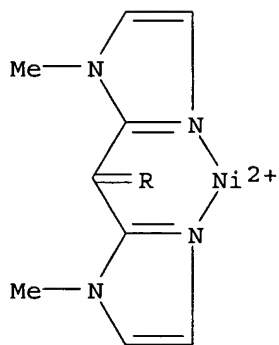
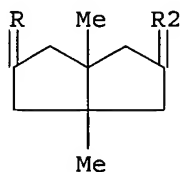
RN 152069-68-6 CAPLUS
 CN Nickel(4+), [μ-[octahydro-3a,6a-dimethyl-
 α,α,α',α'-tetrakis(1-methyl-1H-imidazol-2-yl)-
 2,5-pentalenedimethanol]]-, (2α,3αα,5α,6αα)-

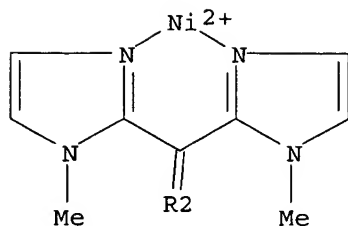
(9CI) (CA INDEX NAME)



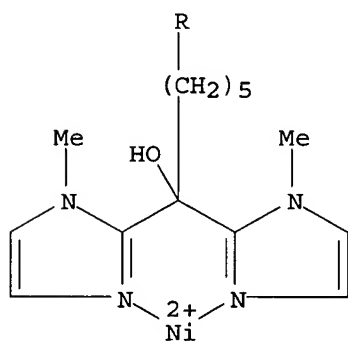
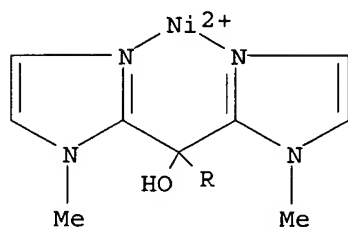
RN 152069-69-7 CAPLUS
 CN Nickel(4+), [μ -[2,2',2'',2''']-[(tetrahydro-3a,6a-dimethyl-2,5(1H,3H)-pentalenediylidene)dimethanetetrayl]tetrakis[1-methyl-1H-imidazole]-N3,N3':N3'',N3''']]di-, cis- (9CI) (CA INDEX NAME)

PAGE 1-A

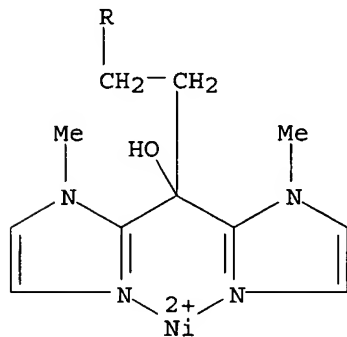
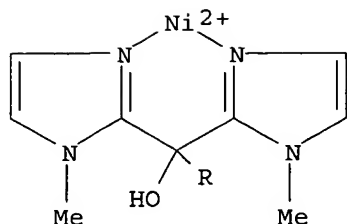




RN 152069-74-4 CAPLUS
 CN Nickel(4+), [μ -[1,1,7,7-tetrakis(1-methyl-1H-imidazol-2-yl)-1,7-heptanediol]]di- (9CI) (CA INDEX NAME)



RN 152069-76-6 CAPLUS
 CN Nickel(4+), [μ -[1,1,4,4-tetrakis(1-methyl-1H-imidazol-2-yl)-1,4-butanediol]]di- (9CI) (CA INDEX NAME)



IT 152069-63-1 152069-64-2 152101-05-8

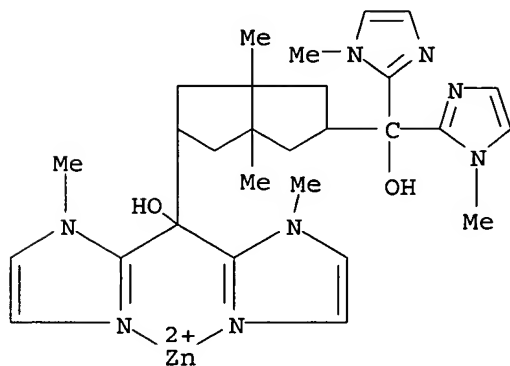
152204-03-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(formation and NMR and DNA binding and phosphate diester hydrolysis
in presence of)

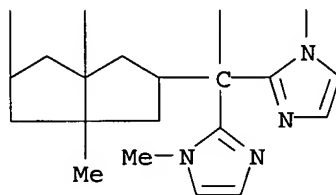
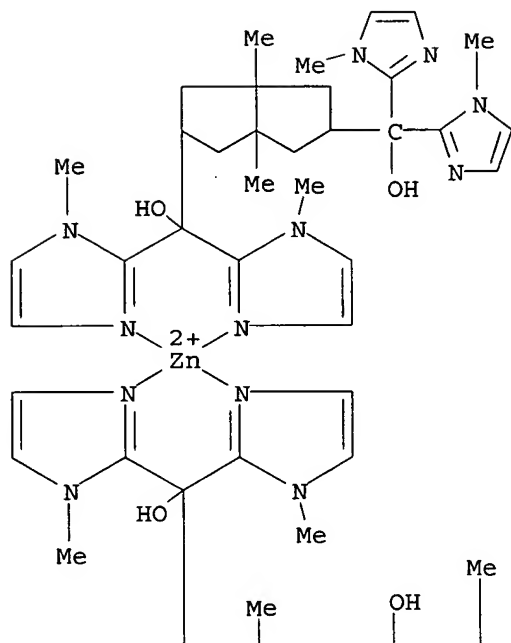
RN 152069-63-1 CAPLUS

CN Zinc(2+), [octahydro-3a,6a-dimethyl- $\alpha,\alpha,\alpha',\alpha'$ -
tetrakis(1-methyl-1H-imidazol-2-yl)-2,5-pentalenedimethanol]-,
(2 α ,3 α ,5 α ,6 α)- (9CI) (CA INDEX NAME)

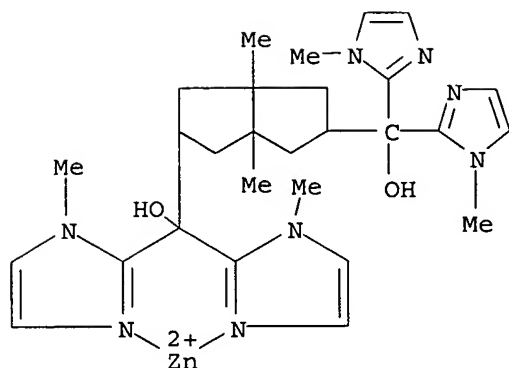


RN 152069-64-2 CAPLUS

CN Zinc(2+), bis[octahydro-3a,6a-dimethyl- $\alpha,\alpha,\alpha',\alpha'$ -
tetrakis(1-methyl-1H-imidazol-2-yl)-2,5-pentalenedimethanol]-,
[T-4-(2 α ,3 α ,5 α ,6 α), (2 α ,3 α ,5 α ,6 α)]- (9CI) (CA INDEX NAME)



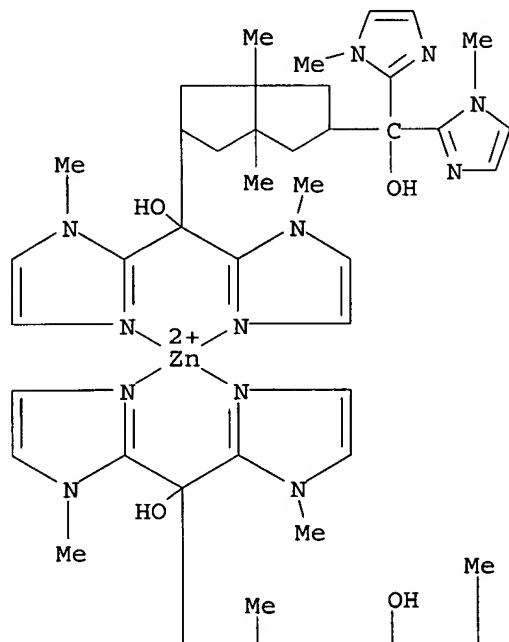
RN 152101-05-8 CAPLUS
 CN Zinc(2+), [octahydro-3a,6a-dimethyl- $\alpha,\alpha,\alpha',\alpha'$ -
 tetrakis(1-methyl-1H-imidazol-2-yl)-2,5-pentalenedimethanol]-,
 (2 α ,3 $\alpha\beta$,5 α ,6 $\alpha\beta$)- (9CI) (CA INDEX NAME)

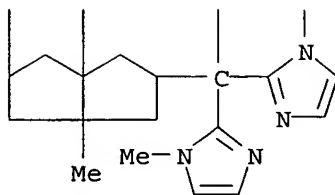


RN 152204-03-0 CAPLUS

CN Zinc(2+), bis[octahydro-3a,6a-dimethyl- α,α,α' , α .'-tetrakis(1-methyl-1H-imidazol-2-yl)-2,5-pentalenedimethanol]-, [T-4-(2 α ,3 $\alpha\beta$,5 α ,6 $\alpha\beta$), (2 α ,3 $\alpha\beta$,5 α ,6 $\alpha\beta$)]- (9CI) (CA INDEX NAME)

PAGE 1-A



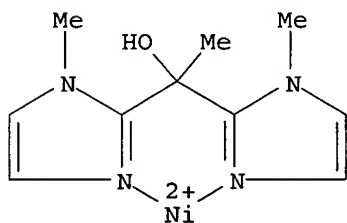


IT 152069-45-9

RL: RCT (Reactant); RACT (Reactant or reagent)
 (formation and NMR and phosphate diester hydrolysis in presence of)

RN 152069-45-9 CAPLUS

CN Nickel(2+), [α ,1-dimethyl- α -(1-methyl-1H-imidazol-2-yl)-1H-imidazole-2-methanol]- (9CI) (CA INDEX NAME)

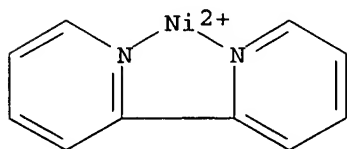


IT 16482-44-3 60553-63-1

RL: RCT (Reactant); RACT (Reactant or reagent)
 (kinetics of phosphate diester hydrolysis in presence of)

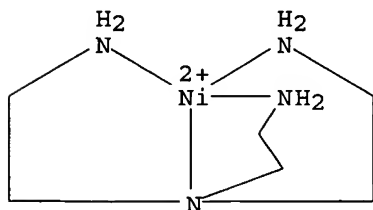
RN 16482-44-3 CAPLUS

CN Nickel(2+), (2,2'-bipyridine- κ N1, κ N1')- (9CI) (CA INDEX NAME)



RN 60553-63-1 CAPLUS

CN Nickel(2+), [N,N-bis[2-(amino- κ N)ethyl]-1,2-ethanediamine- κ N, κ N']-, (T-4)- (9CI) (CA INDEX NAME)



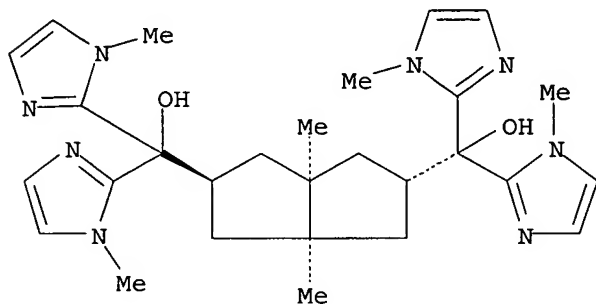
IT 151776-19-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and NMR and dehydration and reactions of, with transition metal salts)

RN 151776-19-1 CAPLUS

CN 2,5-Pentalenedimethanol, octahydro-3a,6a-dimethyl-
 $\alpha,\alpha,\alpha',\alpha'$ -tetrakis(1-methyl-1H-imidazol-2-yl)-
, (2 α ,3 α ,5 β ,6 α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

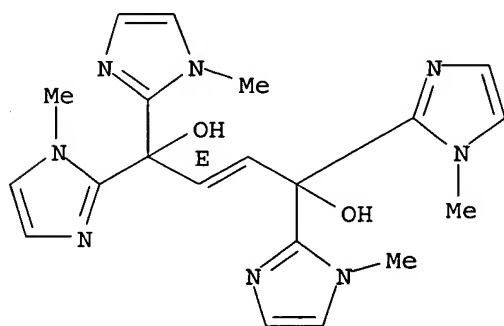
IT 151776-09-9P 151776-11-3P 151776-12-4P
151776-20-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT (Reactant or reagent)
(preparation and NMR and reactions of, with transition metal salts)

RN 151776-09-9 CAPLUS

CN 2-Butene-1,4-diol, 1,1,4,4-tetrakis(1-methyl-1H-imidazol-2-yl)-, (E)-
(9CI) (CA INDEX NAME)

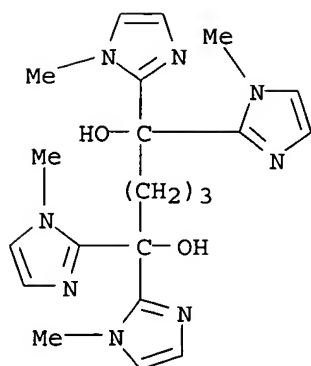
Double bond geometry as shown.



RN 151776-11-3 CAPLUS

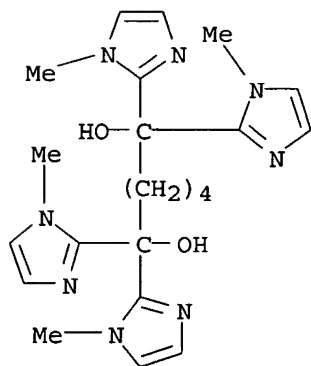
CN 1,5-Pentenediol, 1,1,5,5-tetrakis(1-methyl-1H-imidazol-2-yl)- (9CI)
(CA INDEX NAME)

10/757148



RN 151776-12-4 CAPLUS

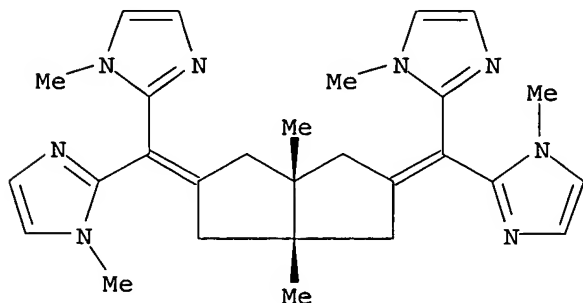
CN 1,6-Hexanediol, 1,1,6,6-tetrakis(1-methyl-1H-imidazol-2-yl)- (9CI)
(CA INDEX NAME)



RN 151776-20-4 CAPLUS

CN 1H-Imidazole, 2,2',2'',2'''-[(tetrahydro-3a,6a-dimethyl-2,5(1H,3H)-
pentalenediylidene)dimethylidyne]tetrakis[1-methyl-, cis- (9CI) (CA
INDEX NAME)

Relative stereochemistry.



IT 151776-17-9P 151776-18-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and NMR and tritiation and dehydration and reactions of,
with transition metal salts)

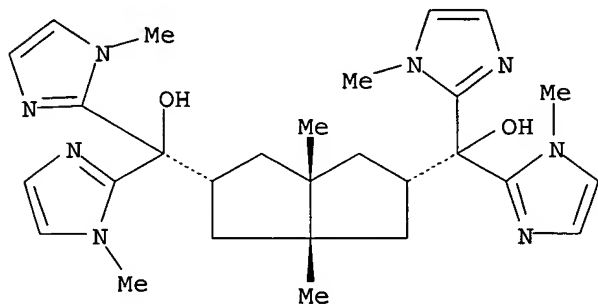
Searcher : Shears 571-272-2528

10/757148

RN 151776-17-9 CAPLUS

CN 2,5-Pentalenedimethanol, octahydro-3a,6a-dimethyl-
 $\alpha,\alpha,\alpha',\alpha'$ -tetrakis(1-methyl-1H-imidazol-2-yl)-
, (2 α ,3 α ,5 α ,6 α)- (9CI) (CA INDEX NAME)

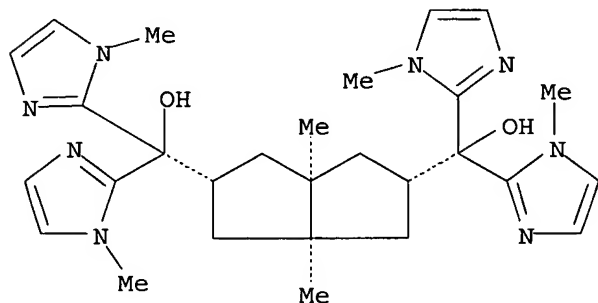
Relative stereochemistry.



RN 151776-18-0 CAPLUS

CN 2,5-Pentalenedimethanol, octahydro-3a,6a-dimethyl-
 $\alpha,\alpha,\alpha',\alpha'$ -tetrakis(1-methyl-1H-imidazol-2-yl)-
, (2 α ,3 α ,5 α ,6 α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

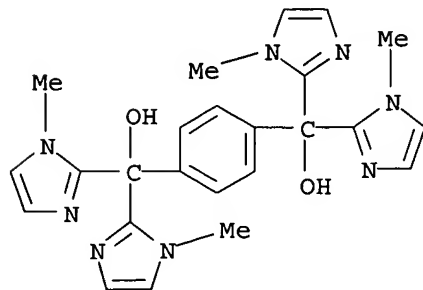


IT 151776-08-8P 151776-10-2P 151776-13-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and NMR and tritiation and reactions of, with transition
metal salts)

RN 151776-08-8 CAPLUS

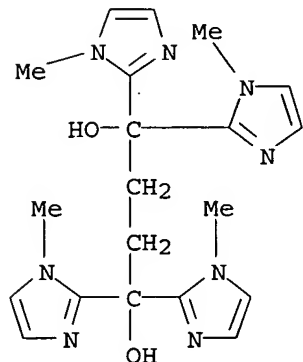
CN 1,4-Benzenedimethanol, $\alpha,\alpha,\alpha',\alpha'$ -tetrakis(1-
methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)



10/757148

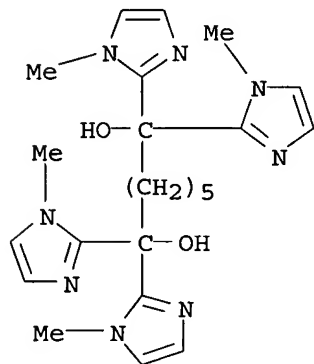
RN 151776-10-2 CAPLUS

CN 1,4-Butanediol, 1,1,4,4-tetrakis(1-methyl-1H-imidazol-2-yl) - (9CI)
(CA INDEX NAME)



RN 151776-13-5 CAPLUS

CN 1,7-Heptanediol, 1,1,7,7-tetrakis(1-methyl-1H-imidazol-2-yl) - (9CI)
(CA INDEX NAME)



IT 152100-99-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal structure of)

RN 152100-99-7 CAPLUS

CN Nickel(3+), diaqua(nitrato-O,O')bis[μ-[1,1,6,6-tetrakis(1-methyl-1H-imidazol-2-yl)-1,6-hexanediol]]di-, stereoisomer, trinitrate, dihydrate (9CI) (CA INDEX NAME)

CM 1

CRN 152100-98-6

CMF C44 H64 N17 Ni2 O9 . 3 N O3

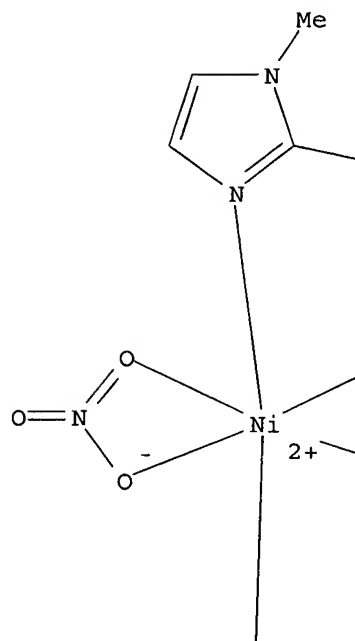
CM 2

CRN 152100-97-5

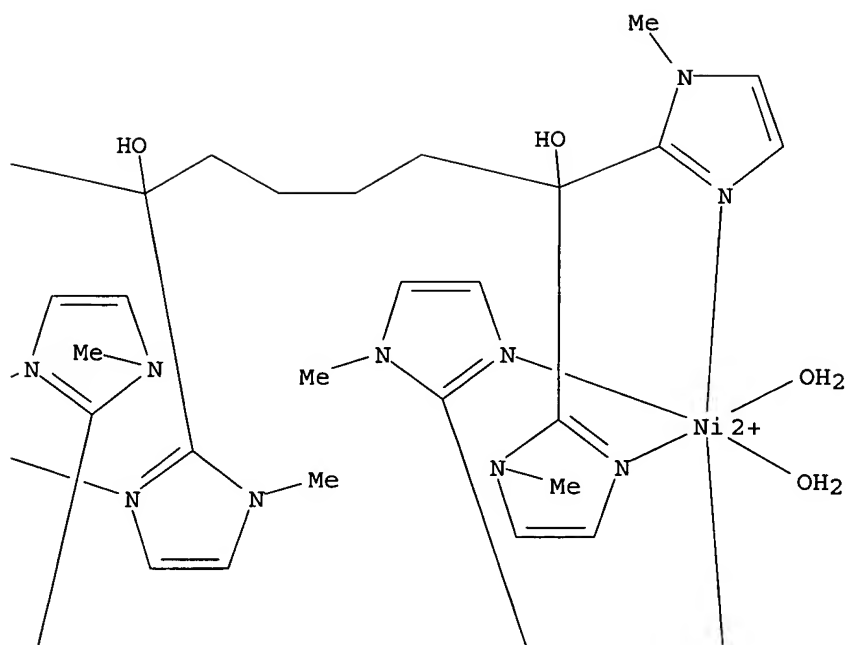
CMF C44 H64 N17 Ni2 O9

CCI CCS

PAGE 1-A

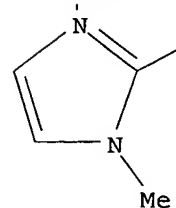


PAGE 1-B

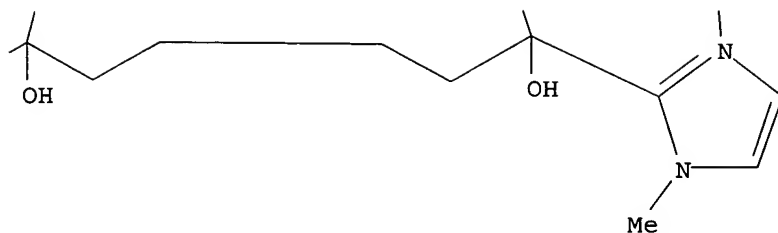


10/757148

PAGE 2-A



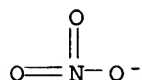
PAGE 2-B



CM 3

CRN 14797-55-8

CMF N O3



IT 152101-02-5P 152130-09-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal structure of racemic)
RN 152101-02-5 CAPLUS
CN Nickel (3+), diaqua(nitrato-O,O')bis[μ-[1,1,4,4-tetrakis(1-methyl-1H-imidazol-2-yl)-1,4-butanediol]]di-, stereoisomer, trinitrate, trihydrate (9CI) (CA INDEX NAME)

CM 1

CRN 152101-01-4

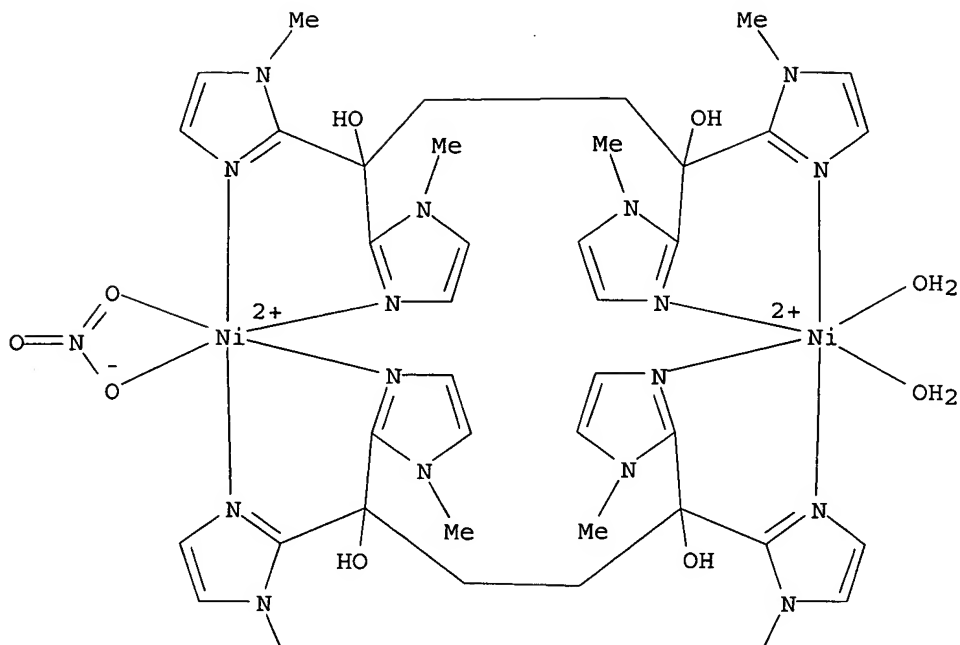
CMF C40 H56 N17 Ni2 O9 . 3 N O3

CM 2

CRN 152101-00-3

CMF C40 H56 N17 Ni2 O9

CCI CCS



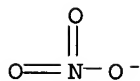
Me

Me

CM 3

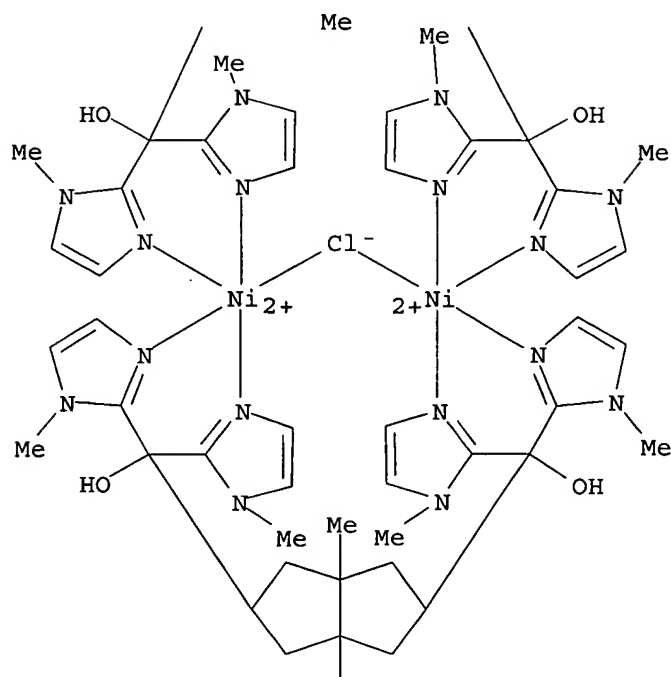
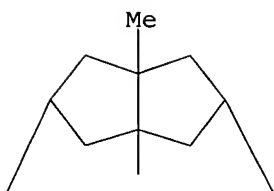
CRN 14797-55-8

CMF N O3



RN 152130-09-1 CAPLUS

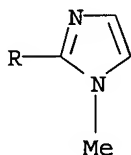
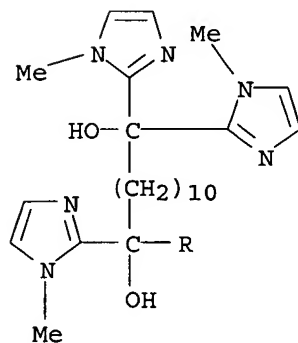
CN Nickel(3+), μ -chlorobis [μ -[octahydro-3a,6a-dimethyl- $\alpha,\alpha,\alpha',\alpha'$ -tetrakis(1-methyl-1H-imidazol-2-yl)-2,5-pentalenedimethanol]]di-, trichloride, octahydrate, stereoisomer (9CI) (CA INDEX NAME)



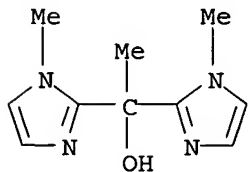
Me

● 3 Cl⁻● 8 H₂O

IT 151776-14-6P 152016-56-3P 152016-57-4P
 152016-58-5P 152016-59-6P 152016-60-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
 RACT (Reactant or reagent)
 (preparation and reactions of, with transition metal salts)
 RN 151776-14-6 CAPLUS
 CN 1,12-Dodecanediol, 1,1,12,12-tetrakis(1-methyl-1H-imidazol-2-yl)-
 (9CI) (CA INDEX NAME)



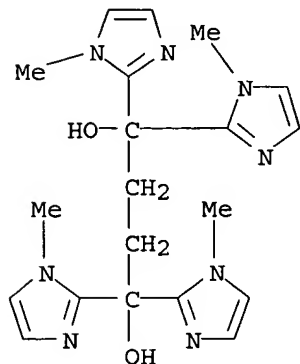
RN 152016-56-3 CAPLUS
 CN 1H-Imidazole-2-methanol, α,1-dimethyl-α-(1-methyl-1H-
 imidazol-2-yl)-, labeled with deuterium (9CI) (CA INDEX NAME)



10/757148

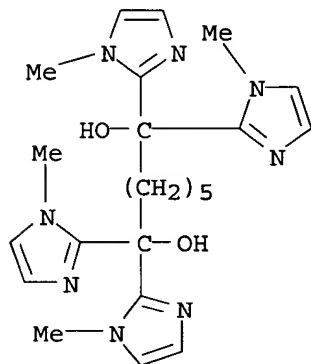
RN 152016-57-4 CAPLUS

CN 1,4-Butanediol, 1,1,4,4-tetrakis(1-methyl-1H-imidazol-2-yl)-, labeled with deuterium (9CI) (CA INDEX NAME)



RN 152016-58-5 CAPLUS

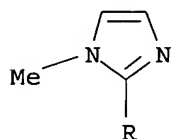
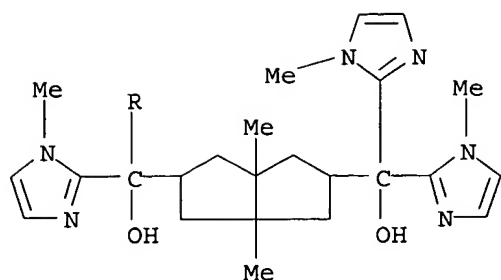
CN 1,7-Heptanediol, 1,1,7,7-tetrakis(1-methyl-1H-imidazol-2-yl)-, labeled with deuterium (9CI) (CA INDEX NAME)



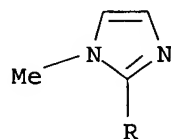
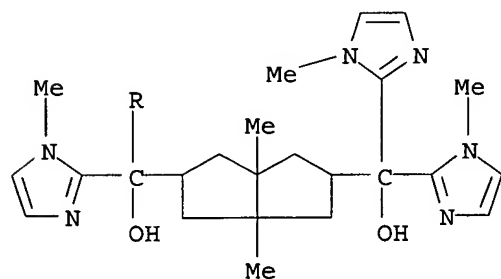
RN 152016-59-6 CAPLUS

CN 2,5-Pentalenedimethanol, octahydro-3a,6a-dimethyl- $\alpha,\alpha,\alpha',\alpha'$ -tetrakis(1-methyl-1H-imidazol-2-yl)-, labeled with deuterium, (2 α ,3 $\alpha\beta$,5 α ,6 $\alpha\beta$)- (9CI) (CA INDEX NAME)

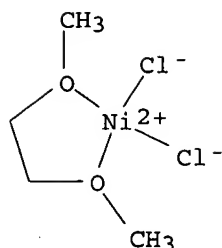
10/757148



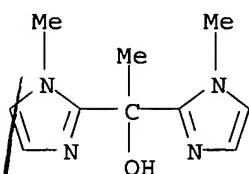
RN 152016-60-9 CAPLUS
CN 2,5-Pentalenedimethanol, octahydro-3a,6a-dimethyl-
α,α,α',α'-tetrakis(1-methyl-1H-imidazol-2-yl) -
, labeled with deuterium, (2α,3aβ,5α,6α) -
(9CI) (CA INDEX NAME)



IT 29046-78-4, Dichloro(1,2-dimethoxyethane)nickel
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with tetrakis(methylimidazolyl) ligands)
RN 29046-78-4 CAPLUS
CN Nickel, dichloro[1,2-di(methoxy-κO)ethane] - (9CI) (CA INDEX
NAME)



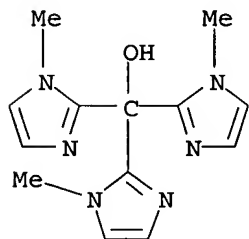
IT 124226-01-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (tritiation and reactions of, with transition metal salts)
 RN 124226-01-3 CAPLUS
 CN 1H-Imidazole-2-methanol, α ,1-dimethyl- α -(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)



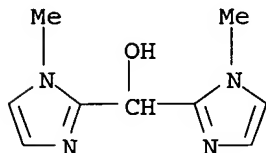
L16 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1988:570513 CAPLUS
 DOCUMENT NUMBER: 109:170513
 TITLE: Synthesis and structural studies of dimethylindium(III) complexes with polydentate nitrogen donor ligands, and of monomethylindium(III) complexes containing alkoxide-bridged binuclear cations
 AUTHOR(S): Canty, Allan J.; Titcombe, Louise A.; Skelton, Brian W.; White, Allan H.
 CORPORATE SOURCE: Chem. Dep., Univ. Tasmania, Hobart, 7001, Australia
 SOURCE: Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1972-1999) (1988), (1), 35-45
 CODEN: JCDTBI; ISSN: 0300-9246
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 109:170513
 GI For diagram(s), see printed CA Issue.
 AB Dimethylindium complexes have been isolated from aqueous MeOH on reaction of [Me₂In]NO₃ with the neutral N-donor ligands 1,10-phenanthroline, 2,2'-bipyridyl and 4,4'-disubstituted 2,2'-bipyridyls, bis(pyridin-2-yl)methane [(py)₂CH₂], bis(N-methylimidazol-2-yl)methanol, 2,2':6,2''-terpyridyl (terpy), 4,4',4''-triethyl-2,2':6'',2''-terpyridyl (Et₃terpy), and N-methyl-2-(pyridin-2-yl)imidazole. X-ray crystallog. studies at 295 K of 2 of the complexes, [InMe₂{(py)₂CH₂}(NO₃)(H₂O)] (I) and [InMe₂(Et₃terpy)NO₃] (II), shows trans-Me groups in a distorted octahedron for I and five-coordinate geometry for II. The InMe₂ complexes of terpy and Et₃terpy are photochromic, changing slowly from pale yellow to emerald

green in bright light, and back to yellow in darkness. Reaction of $[\text{InMe}_2]\text{NO}_3$ with bis(pyridin-2-yl)phenylmethanol $[(\text{py})_2\text{C}(\text{OH})\text{Ph}]$, tris(pyridin-2-yl)methanol, tris(N-methylimidazol-2-yl)methanol, bis(N-methylimidazol-2-yl)(pyridin-2-yl)methanol $[(\text{py})\text{C}(\text{OH})(\text{mim})_2]$, and (N-methylimidazol-2-yl)bis(pyridin-2-yl)methanol, results in isolation of monomethylindium (III) complexes containing binuclear cations, with the structures of 2 of these, $\text{py}_2\text{C}(\text{OH})\text{Ph}$ derivative $\text{III} \cdot 0.75 \text{H}_2\text{O}$ and the $(\text{py})\text{C}(\text{OH})(\text{mim})_2$ analog of III ($\text{IV} \cdot \text{H}_2\text{O} \cdot \text{Me}_2\text{CO}$), established crystallog. Each ligand has a py group coordinated to one In atom and an N-donor group coordinated to the other In, with alkoxide bridges forming an In_2O_2 kernel and trans-Me groups for the equatorial planes $\text{In}_2\text{Me}_2(\text{py})_2(\mu\text{-O})_2$ and $\text{In}_2\text{Me}_2(\text{mim})_2(\mu\text{-O})_2$. In is completed by a water mol., and a nitrate group interacts unsym. with the other In with both aquo and nitrate groups trans to axial py groups in both complexes. The geometry at the In atoms in III and IV is irregular, but, except for the orientation of the more weakly coordinating aquo and nitrate groups in each complex, the In atoms have similar geometry. InMe_2 and InMe complexes form conducting solns. with retention of Ni-donor coordination; the binuclear complexes exhibit complex variable-temperature ^1H NMR spectra in CD_3OD resulting from the presence of exchange between N-donor sites and also between isomers for complexes of ligands containing both py and mim donor groups.

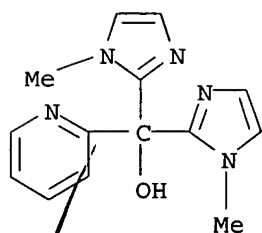
IT 67319-02-2 67319-03-3, Bis(N-methylimidazol-2-yl)methanol 74126-82-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (complexation of, with dimethylindium nitrate)
 RN 67319-02-2 CAPLUS
 CN 1H-Imidazole-2-methanol, 1-methyl- α,α -bis(1-methyl-1H-imidazol-2-yl) - (9CI) (CA INDEX NAME)



RN 67319-03-3 CAPLUS
 CN 1H-Imidazole-2-methanol, 1-methyl- α -(1-methyl-1H-imidazol-2-yl) - (9CI) (CA INDEX NAME)



RN 74126-82-2 CAPLUS
 CN 2-Pyridinemethanol, α,α -bis(1-methyl-1H-imidazol-2-yl) - (9CI) (CA INDEX NAME)



116 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1980:460173 CAPLUS

DOCUMENT NUMBER: 93:60173

TITLE: Synthesis and physical studies of pyridine- and imidazole-containing tridentate metal-binding ligands

AUTHOR(S): Brown, R. S.; Huguet, J.

CORPORATE SOURCE: Dep. Chem., Univ. Alberta, Edmonton, AB, T6G 2G2, Can.

SOURCE: Canadian Journal of Chemistry (1980), 58(9), 889-901

CODEN: CJCHAG; ISSN: 0008-4042

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Several tridentate ligands incorporating pyridine and substituted imidazole rings were prepared and their phys. properties studied as models for the enzyme carbonic anhydrase (CA). The H⁺- and M²⁺-binding abilities (pK_a and pK_{M2+}) were determined. In the case of the imidazole ligands, N-methylation reduces the metal-binding ability of the ligand by some 3-4 pK_{M2+} units over the unsubstituted analogs. ¹H NMR studies of the simple ligands as a function of [Zn²⁺] show that the ligands are bound sym. as 1:1 and 2:1 complexes depending upon the ligand/metal ratio. Increasing the steric bulk of the ligands by introduction of 4,5-diisopropyl substituents on the imidazole inhibits the 2:1 (ligand/metal) complex. Titration expts. of several ligands bound to equimolar Zn²⁺ and Co²⁺ are described and analyzed.

IT 7440-02-0D, complexes with tridentate ligands containing pyridyl and imidazolyl substituents

RL: RCT (Reactant); RACT (Reactant or reagent)
(as carbonic anhydrase models)

RN 7440-02-0 CAPLUS

CN Nickel (8CI, 9CI) (CA INDEX NAME)

Ni

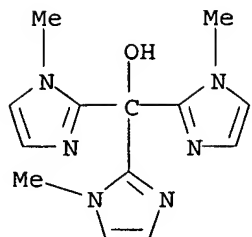
IT 67319-02-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(as model of metal-binding site in carbonic anhydrase)

RN 67319-02-2 CAPLUS

CN 1H-Imidazole-2-methanol, 1-methyl- α,α -bis(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)

10/757148

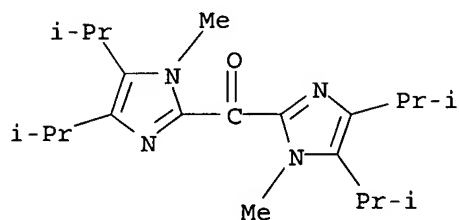


IT 74126-94-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT (Reactant or reagent)
(preparation and reaction of, with N-methoxymethyl-2,4,5-trimethylimidazole)

RN 74126-94-6 CAPLUS

CN Methanone, bis[1-methyl-4,5-bis(1-methylethyl)-1H-imidazol-2-yl]-
(9CI) (CA INDEX NAME)



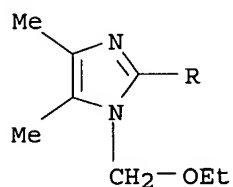
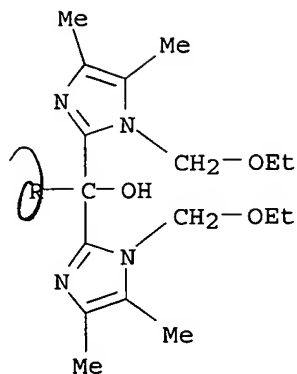
IT 74126-90-2P 74126-91-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and removal of ethoxymethyl group from)

RN 74126-90-2 CAPLUS

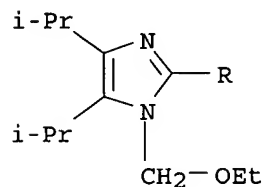
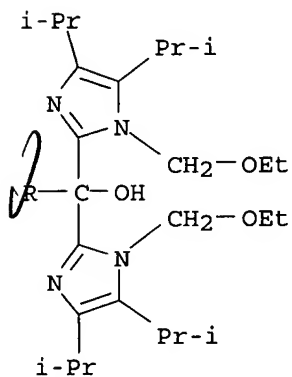
CN 1H-Imidazole-2-methanol, 1-(ethoxymethyl)- α,α -bis[1-(ethoxymethyl)-4,5-dimethyl-1H-imidazol-2-yl]-4,5-dimethyl- (9CI) (CA INDEX NAME)

10/757148



RN 74126-91-3 CAPLUS

CN 1H-Imidazole-2-methanol, 1-(ethoxymethyl)- α,α -bis[1-(ethoxymethyl)-4,5-bis(1-methylethyl)-1H-imidazol-2-yl]-4,5-bis(1-methylethyl)- (9CI) (CA INDEX NAME)



IT 74126-82-2P 74126-86-6P 74140-70-8P

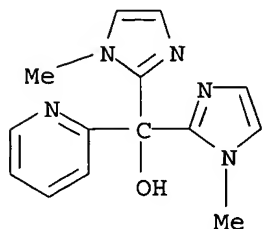
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as model for metal-binding site of carbonic anhydrase)

Searcher : Shears 571-272-2528

10/757148

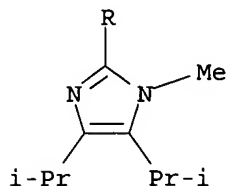
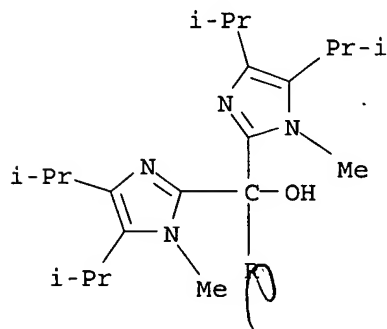
RN 74126-82-2 CAPLUS

CN 2-Pyridinemethanol, α,α -bis(1-methyl-1H-imidazol-2-yl)-
(9CI) (CA INDEX NAME)



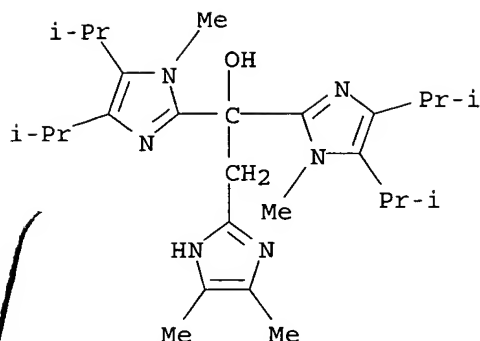
RN 74126-86-6 CAPLUS

CN 1H-Imidazole-2-methanol, 1-methyl- α,α -bis[1-methyl-4,5-bis(1-methylethyl)-1H-imidazol-2-yl]-4,5-bis(1-methylethyl)- (9CI)
(CA INDEX NAME)



RN 74140-70-8 CAPLUS

CN 1H-Imidazole-2-ethanol, 4,5-dimethyl- α,α -bis[1-methyl-4,5-bis(1-methylethyl)-1H-imidazol-2-yl]- (9CI) (CA INDEX NAME)



L16 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1978:502772 CAPLUS

DOCUMENT NUMBER: 89:102772

TITLE: Models for metal binding sites in zinc enzymes. Syntheses of tris[4(5)-imidazolyl]carbinol (4-TIC), tris(2-imidazolyl)carbinol (2-TIC), and related ligands, and studies on metal complex binding constants and spectra

AUTHOR(S): Tang, Chaucer C.; Davalian, Dariush; Huang, Paul; Breslow, Ronald

CORPORATE SOURCE: Dep. Chem., Columbia Univ., New York, NY, USA

SOURCE: Journal of the American Chemical Society (1978), 100(12), 3918-22

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Tris[4(5)imidazolyl]carbinol (I) and tris(2-imidazolyl)carbinol (II) were synthesized as models for the Zn-binding site of carbonic anhydrase and of alkaline phosphatase. Bis[4(5)imidazolyl]glycolic acid (III) was synthesized to mimic the Zn-binding site of carboxypeptidases and of thermolysin; bis[4(5)imidazolyl]carbinol (IV) was also synthesized. Basicities and metal binding consts. were determined for I, II, III, and IV, as well as for bis(2-imidazolyl)methane and 3-[bis(2-imidazolyl)]propionic acid. The data are compared with those reported for bis[4(5)imidazolyl]methane and for human carbonic anhydrase B and carboxypeptidase A. I and II are tridentate ligands using 3 imidazole groups, but I is more basic and a stronger metal complexing agent. The binding consts. of I are comparable to those of the enzymes for Co^{2+} , Ni^{2+} , and Cu^{2+} but not for Zn^{2+} . Spectral and binding studies suggest that the geometry of I is not quite right for a good mimic of carbonic anhydrase.

IT 7440-02-0, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(imidazole derivs. binding of, as metalloenzyme model)

RN 7440-02-0 CAPLUS

CN Nickel (8CI, 9CI) (CA INDEX NAME)

Ni

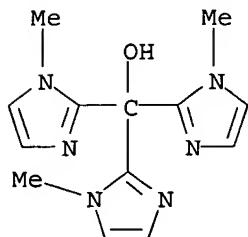
IT 67319-02-2P 67319-03-3P 67319-13-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

10/757148

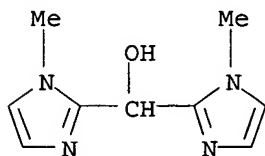
RN 67319-02-2 CAPLUS

CN 1H-Imidazole-2-methanol, 1-methyl- α,α -bis(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)



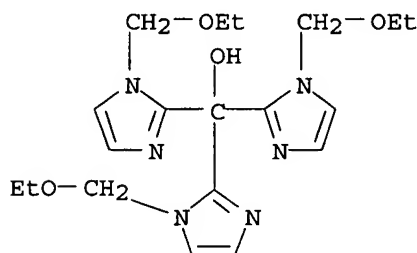
RN 67319-03-3 CAPLUS

CN 1H-Imidazole-2-methanol, 1-methyl- α -(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)



RN 67319-13-5 CAPLUS

CN 1H-Imidazole-2-methanol, 1-(ethoxymethyl)- α,α -bis[1-(ethoxymethyl)-1H-imidazol-2-yl]- (9CI) (CA INDEX NAME)



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10/757148

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L17 3 L5

L17 ANSWER 1 OF 3 CAOLD COPYRIGHT 2006 ACS on STN

AN CA65:13688f CAOLD

TI methylenedihydantoin and related compds. - (I) reaction of pyruvic acid and urea-synthesis of 5-methylenedihydantoin

AU Murahashi, Shunsuke; Yuki, H.; Kosai, K.; Doura, F.

IT 616-03-5 7673-65-6 10045-58-6 10045-60-0
10045-61-1 10045-71-3 10045-72-4 10045-73-5 10058-40-9

L17 ANSWER 2 OF 3 CAOLD COPYRIGHT 2006 ACS on STN

AN CA58:12532e CAOLD

TI thermal condensation of imidazoles with carbonyl compds.

AU Roe, Anthony M.

IT 274-76-0 616-47-7 823-61-0 4098-14-0 4238-71-5 5272-57-1
15562-25-1 20075-26-7 22098-61-9 30517-60-3 50436-60-7 53981-69-4
59301-04-1 59301-05-2 59301-07-4 68090-14-2 89600-81-7 90152-69-5
90565-18-7 90565-79-0 90770-15-3 91010-59-2 91094-09-6 91347-71-6
91565-99-0 91634-00-3 91634-01-4 91695-75-9 91769-20-9 91982-01-3
92292-18-7 92384-21-9 92439-88-8 92555-98-1 92555-99-2 92556-28-0
92556-37-1 92647-87-5 92799-37-6 93262-35-2 93330-90-6 94095-79-1
94408-69-2 94523-31-6 95323-45-8 95750-63-3 95750-64-4
96001-10-4 98067-10-8 98528-09-7

L17 ANSWER 3 OF 3 CAOLD COPYRIGHT 2006 ACS on STN

AN CA54:9270c CAOLD

TI corrosion inhibitors

PA Cities Service Research & Development Co.

DT Patent

TI inhibiting corrosion by oil-brine mixts.

AU Hughes, William B.

DT Patent

PATENT NO.	KIND	DATE
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PI US 2918474 1959

IT 102882-26-8 103507-65-9 113186-69-9 120639-35-2 123103-17-3

FILE 'USPATFULL' ENTERED AT 14:52:19 ON 18 MAY 2006

CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 18 May 2006 (20060518/PD)

FILE LAST UPDATED: 18 May 2006 (20060518/ED)

HIGHEST GRANTED PATENT NUMBER: US7047565

HIGHEST APPLICATION PUBLICATION NUMBER: US2006107430

CA INDEXING IS CURRENT THROUGH 18 May 2006 (20060518/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 18 May 2006 (20060518/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2006

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2006

L18 18 S L5

L18 ANSWER 1 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2005:293591 USPATFULL

TITLE: Condensed pyridines and pyrimidines with tie2 (tek)

Searcher : Shears 571-272-2528

10/757148

INVENTOR(S): activity
Luke, Richard William Arthur, ASTRAZENECA R & D
ALDERLEY, ALDERLEY PARK, MACCLESFIELD, CHESHIRE,
UNITED KINGDOM SK10 4TG
Jones, Clifford David, Macclesfield Cheshire,
UNITED KINGDOM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005256140	A1	20051117
APPLICATION INFO.:	US 2003-523401	A1	20030801 (10)
	WO 2003-GB3275		20030801
			20050203 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 2002-18168	20020806
	GB 2003-12356	20030530
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	ASTRAZENECA R&D BOSTON, 35 GATEHOUSE DRIVE, WALTHAM, MA, 02451-1215, US	
NUMBER OF CLAIMS:	8	
EXEMPLARY CLAIM:	1	
LINE COUNT:	6948	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A compound of the Formula (I), wherein A together with the carbon atoms to which it is attached forms a fused 5-membered heteroaryl ring, wherein said heteroaryl ring contains 1 or 2 heteroatoms selected from O, N and S, and wherein the 5-membered ring containing G is linked to the ring formed by A in the meta position to the bridgehead carbon marked # in Formula (I): G is selected from O, S and NR^{sup.5}; Z is selected from N and CR^{sup.6}; Q^{sup.1} is selected from optionally substituted aryl and heteroaryl, and the substituents R^{sup.1} to R^{sup.6} are as defined in the text for use in the production of an anti-angiogenic effect in a warm blooded animal such as man.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 2 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2005:248594 USPATFULL

TITLE: Copper-catalyzed formation of carbon heteroatom and carbon-carbon bonds

INVENTOR(S): Buchwald, Stephen L., Newton, MA, UNITED STATES
Klapars, Artis, Cambridge, MA, UNITED STATES
Antilla, Jon C., Malden, MA, UNITED STATES
Job, Gabriel E., Quincy, MA, UNITED STATES
Wolter, Martina, Berlin, GERMANY, FEDERAL REPUBLIC OF
Kwong, Fuk Y., Cambridge, MA, UNITED STATES
Nordmann, Gero, Boston, MA, UNITED STATES
Hennessy, Edward J., Boston, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005215794	A1	20050929
APPLICATION INFO.:	US 2005-28500	A1	20050104 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2003-435719, filed on 8 May 2003, GRANTED, Pat. No. US 6867298		Division of Ser.

Searcher : Shears 571-272-2528

10/757148

No. US 2002-128981, filed on 24 Apr 2002, GRANTED,
Pat. No. US 6759554

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-286268P	20010424 (60)
	US 2001-348014P	20011024 (60)
	US 2001-344208P	20011221 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110, US	
NUMBER OF CLAIMS:	92	
EXEMPLARY CLAIM:	1-181	
NUMBER OF DRAWINGS:	26 Drawing Page(s)	
LINE COUNT:	9011	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

AB The present invention relates to copper-catalyzed carbon-heteroatom and carbon-carbon bond-forming methods. In certain embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-nitrogen bond between the nitrogen atom of an amide or amine moiety and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. In additional embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-nitrogen bond between a nitrogen atom of an acyl hydrazine and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. In other embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-nitrogen bond between the nitrogen atom of a nitrogen-containing heteroaromatic, e.g., indole, pyrazole, and indazole, and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. In certain embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-oxygen bond between the oxygen atom of an alcohol and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. The present invention also relates to copper-catalyzed methods of forming a carbon-carbon bond between a reactant comprising a nucleophilic carbon atom, e.g., an enolate or malonate anion, and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. Importantly, all the methods of the present invention are relatively inexpensive to practice due to the low cost of the copper comprised by the catalysts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 3 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2004:208973 USPATFULL
TITLE: Method for producing coupling compound
INVENTOR(S): Itahashi, Tamon, Osaka, JAPAN
Kamikawa, Takashi, Nara-shi, JAPAN
PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited (non-U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004161404	A1	20040819
APPLICATION INFO.:	US 2004-757148	A1	20040114 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-9637	20030117

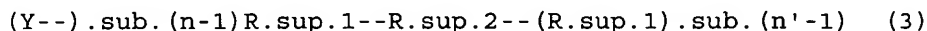
Searcher : Shears 571-272-2528

10/757148

DOCUMENT TYPE: JP 2003-111282 20030416
UTILITY
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: AKIN GUMP STRAUSS HAUSER & FELD L.L.P., ONE COMMERCE
SQUARE, 2005 MARKET STREET, SUITE 2200,
PHILADELPHIA, PA, 19103-7013
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 716

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There are disclosed a method for producing a cross-coupling compound
of formula (3):



wherein $R.sup.1$ represents

a substituted or unsubstituted, linear, branched, or cyclic
hydrocarbon group, and

n and n' each represent 1 or 2,

provided that when n and n' are the same, both n and n' are not 2,

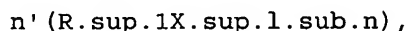
$R.sup.2$ represents a substituted or unsubstituted aryl, substituted
or unsubstituted heteroaryl or substituted or unsubstituted alkenyl
group,

and

Y represents $R.sup.2$ or $X.sup.1$, wherein $R.sup.2$ is as defined
above, and $X.sup.1$ represents a chlorine, bromine or iodine atom,

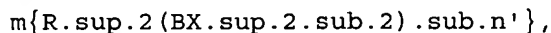
which method comprises reacting

an organic halide of formula (1):



wherein $R.sup.1$ is as defined above and carbon atoms at the α
and β positions relative to $X.sup.1$ are $sp.sup.3$ carbon atoms,
and $X.sup.1$, n and n' are as defined above,

with a boron compound of formula (2):



wherein $R.sup.2$ and n' are as defined above,

$X.sup.2$ independently represents a hydroxyl group or an alkoxy or
aryloxy group, or $X.sup.2.sub.2$ together form an alkoxy or aryloxy
group, and m represents 1 or 2, and $m \geq n$, and the boron atom
is bonded with a $sp.sup.2$ carbon atom of $R.sup.2$ group, or a boronic
acid trimer anhydride thereof,

in the presence of a base and a catalyst comprising a nickel
compound and a compound of formula (i): ##STR1##

wherein $R.sup.3$ represents a substituted or unsubstituted alkyl
group,

R.sup.4 represents a hydrogen atom or an substituted or unsubstituted alkyl group,

l represents an integer of 1 to 3, and

p and q each represents an integer of 0 to 2; and a catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 4 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2004:70759 USPATFULL
 TITLE: Bis-heterocyclic compounds with antitumour and chemosensitising activity
 INVENTOR(S): Giannini, Giuseppe, Roma, ITALY
 Marzi, Mauro, Roma, ITALY
 Tinti, Maria Ornella, Roma, ITALY
 Pisano, Claudio, Roma, ITALY
 Moretti, Gian Piero, Roma, ITALY
 Minetti, Patrizia, Roma, ITALY
 Garattini, Enrico, Milan, ITALY
 Penco, Sergio, Milan, ITALY

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004053987	A1	20040318
APPLICATION INFO.:	US 2003-415898	A1	20030909 (10)
	WO 2001-IT407		20010726

	NUMBER	DATE
PRIORITY INFORMATION:	IT 2000-RM569	20001103
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA, 22201-4714	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Page(s)	
LINE COUNT:	2046	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Bis-heterocyclic compounds of general formula (1) are described which are useful as antitumour and cheomsensitising agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 5 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2004:25374 USPATFULL
 TITLE: Copper-catalyzed formation of carbon-heteroatom and carbon-carbon bonds
 INVENTOR(S): Buchwald, Stephen L., Newton, MA, UNITED STATES
 Klapars, Artis, Cambridge, MA, UNITED STATES
 Antilla, Jon C., Malden, MA, UNITED STATES
 Job, Gabriel E., Quincy, MA, UNITED STATES
 Wolter, Martina, Cambridge, MA, UNITED STATES
 Kwong, Fuk Y., Cambridge, MA, UNITED STATES
 Nordmann, Gero, Boston, MA, UNITED STATES
 Hennessy, Edward J., Boston, MA, UNITED STATES

NUMBER	KIND	DATE
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 PATENT INFORMATION: US 2004019216 A1 20040129
 US 6867298 B2 20050315
 APPLICATION INFO.: US 2003-435719 A1 20030508 (10)
 RELATED APPLN. INFO.: Division of Ser. No. US 2002-128981, filed on 24
 Apr 2002, PENDING

 NUMBER DATE

 PRIORITY INFORMATION: US 2001-286268P 20010424 (60)
 US 2001-348014P 20011024 (60)
 US 2001-344208P 20011221 (60)
 DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER
 WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110
 NUMBER OF CLAIMS: 364
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 26 Drawing Page(s)
 LINE COUNT: 10680
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to copper-catalyzed carbon-heteroatom and carbon-carbon bond-forming methods. In certain embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-nitrogen bond between the nitrogen atom of an amide or amine moiety and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. In additional embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-nitrogen bond between a nitrogen atom of an acyl hydrazine and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. In other embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-nitrogen bond between the nitrogen atom of a nitrogen-containing heteroaromatic, e.g., indole, pyrazole, and indazole, and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. In certain embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-oxygen bond between the oxygen atom of an alcohol and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. The present invention also relates to copper-catalyzed methods of forming a carbon-carbon bond between a reactant comprising a nucleophilic carbon atom, e.g., an enolate or malonate anion, and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. Importantly, all the methods of the present invention are relatively inexpensive to practice due to the low cost of the copper comprised by the catalysts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 6 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2003:93826 USPATFULL

TITLE: Copper-catalyzed formation of carbon-heteroatom and carbon-carbon bonds

INVENTOR(S): Buchwald, Stephen L., Newton, MA, UNITED STATES
 Klapars, Artis, Cambridge, MA, UNITED STATES
 Antilla, Jon C., Malden, MA, UNITED STATES
 Job, Gabriel E., Quincy, MA, UNITED STATES
 Wolter, Martina, Berlin, GERMANY, FEDERAL REPUBLIC
 OF
 Kwong, Fuk Y., Cambridge, MA, UNITED STATES
 Nordmann, Gero, Boston, MA, UNITED STATES

Hennessy, Edward J., Boston, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003065187	A1	20030403
	US 6759554	B2	20040706
APPLICATION INFO.:	US 2002-128981	A1	20020424 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-286268P	20010424 (60)
	US 2001-348014P	20011024 (60)
	US 2001-344208P	20011221 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110	
NUMBER OF CLAIMS:	364	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	26 Drawing Page(s)	
LINE COUNT:	10684	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to copper-catalyzed carbon-heteroatom and carbon-carbon bond-forming methods. In certain embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-nitrogen bond between the nitrogen atom of an amide or amine moiety and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. In additional embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-nitrogen bond between a nitrogen atom of an acyl hydrazine and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. In other embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-nitrogen bond between the nitrogen atom of a nitrogen-containing heteroaromatic, e.g., indole, pyrazole, and indazole, and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. In certain embodiments, the present invention relates to copper-catalyzed methods of forming a carbon-oxygen bond between the oxygen atom of an alcohol and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. The present invention also relates to copper-catalyzed methods of forming a carbon-carbon bond between a reactant comprising a nucleophilic carbon atom, e.g., an enolate or malonate anion, and the activated carbon of an aryl, heteroaryl, or vinyl halide or sulfonate. Importantly, all the methods of the present invention are relatively inexpensive to practice due to the low cost of the copper comprised by the catalysts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 7 OF 18 USPATFULL on STN

ACCESSION NUMBER: 97:59351 USPATFULL

TITLE: Metal ion binding monomer and polymer

INVENTOR(S): Ippoliti, J. Thomas, St. Paul, MN, United States
Mabbott, Gary A., St. Paul, MN, United States
Hans, Jeremy, Madison, WI, United States
Stohlmeyer, Michelle, Dubuque, IA, United States
PATENT ASSIGNEE(S): Research Corporation Technologies, Inc., Tucson,
AZ, United States (U.S. corporation)

NUMBER	KIND	DATE
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Searcher : Shears 571-272-2528

PATENT INFORMATION: US 5646296 19970708
 APPLICATION INFO.: US 1994-317433 19941003 (8)
 RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-130330,
 filed on 1 Oct 1993, now patented, Pat. No. US
 5455359

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Schofer, Joseph L.
 ASSISTANT EXAMINER: Cheng, Wu C.
 LEGAL REPRESENTATIVE: Scully, Scott, Murphy & Presser
 NUMBER OF CLAIMS: 16
 EXEMPLARY CLAIM: 1
 LINE COUNT: 1442

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to bis-imidazolyl compounds of the
 formula: ##STR1## and polymers having the above-identified
 bis-imidazolyl compounds as a polymerizable unit. The present
 invention further relates to a method for scavenging trace
 quantities of metal ions from various effluents sources using the
 polymers of the instant invention. The instant invention also is
 directed to the use of the above-identified polymers as corrosion
 inhibiting agents and as a film for use in gel electrophoresis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 8 OF 18 USPATFULL on STN

ACCESSION NUMBER: 97:56266 USPATFULL
 TITLE: Quaternary cationic surfactants having multiple
 hydrophobic and hydrophilic groups
 INVENTOR(S): Li, Ji, East Windsor, NJ, United States
 Dahanayake, Manilal, Princeton Junction, NJ, United
 States
 Reiersen, Robert Lee, Cranbury, NJ, United States
 Tracy, David James, Plainsboro, NJ, United States
 PATENT ASSIGNEE(S): Rhone-Poulenc Inc., Cranbury, NJ, United States
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5643498		19970701
APPLICATION INFO.:	US 1994-292896		19940819 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Richter, Johann		
ASSISTANT EXAMINER:	Stockton, Laura L.		
LEGAL REPRESENTATIVE:	Juettner, Paul J., Bell, Craig M.		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1		
LINE COUNT:	418		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB According to the invention, an improved class of quaternary cationic
 surfactants having two imidazolinium groups have been provided
 comprising compounds of the formula: ##STR1## The surfactants of the
 subject invention have two hydrophobic moieties and two hydrophilic
 groups per molecule and are useful as hair and fabric conditioners
 as well as biocidal agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 9 OF 18 USPATFULL on STN

ACCESSION NUMBER: 97:49773 USPATFULL
 TITLE: Metal ion binding monomer and polymer
 INVENTOR(S): Ippoliti, J. Thomas, St. Paul, MN, United States
 Mabbott, Gary A., St. Paul, MN, United States
 Hans, Jeremy, Madison, WI, United States
 Stohlmeyer, Michelle, Dubuque, IA, United States
 PATENT ASSIGNEE(S): Research Corporation Technologies, Inc., Tucson,
 AZ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5637728		19970610
APPLICATION INFO.:	US 1995-466158		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-317433, filed on 3 Oct 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-130330, filed on 1 Oct 1993, now patented, Pat. No. US 5455359		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Schofer, Joseph L.		
ASSISTANT EXAMINER:	Cheng, Wu C.		
LEGAL REPRESENTATIVE:	Scully, Scott, Murphy & Presser		
NUMBER OF CLAIMS:	36		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1529		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to bis-imidazolyl compounds of the formula: ##STR1## and polymers having the above-identified bis-imidazolyl compounds as a polymerizable unit. The present invention further relates to a method for scavenging trace quantities of metal ions from various effluents sources using the polymers of the instant invention. The instant invention also is directed to the use of the above-identified polymers as corrosion inhibiting agents and as a film for use in gel electrophoresis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 10 OF 18 USPATFULL on STN

ACCESSION NUMBER: 97:42889 USPATFULL
 TITLE: Substituted 6,11-ethano-6,11-dihydrobenzo[B]quinolizinium salts and compositions and methods of use thereof
 INVENTOR(S): DeHaven-Hudkins, Diane L., West Pikeland Township, Chester County, PA, United States
 Dority, Jr., John A., Upper Providence Township, Montgomery County, PA, United States
 Earley, William G., East Vincent Township, Chester County, PA, United States
 Kumar, Virendra, Tredyffrin Township, Chester County, PA, United States
 Mallamo, John P., Uwchlan Township, Chester County, PA, United States
 Miller, Matthew S., Lower Makefield Township, Bucks County, PA, United States
 Subramanyam, Chakrapani, Towamencin Township, Montgomery County, PA, United States
 PATENT ASSIGNEE(S): Sanofi Winthrop, Inc., New York, NY, United States (U.S. corporation)

10/757148

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5631264		19970520
APPLICATION INFO.:	US 1995-449125		19950524 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-283317, filed on 7 Jul 1994, now patented, Pat. No. US 5554620 which is a continuation-in-part of Ser. No. US 1993-121127, filed on 14 Sep 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Ivy, C. Warren		
ASSISTANT EXAMINER:	Huang, Evelyn		
LEGAL REPRESENTATIVE:	Dupont, Paul E., Davis, William J.		
NUMBER OF CLAIMS:	26		
EXEMPLARY CLAIM:	1		
LINE COUNT:	7268		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			
AB	Substituted 6,11-ethano-6,11-dihydrobenzo[b]quinolizinium salts, pharmaceutical compositions containing them, and methods for the treatment or prevention of neurodegenerative disorders or neurotoxic injuries utilizing them.		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 11 OF 18 USPATFULL on STN

ACCESSION NUMBER:	97:16147	USPATFULL
TITLE:	Metal ion binding monomer and polymer	
INVENTOR(S):	Ippoliti, J. Thomas, St. Paul, MN, United States	
	Mabbott, Gary A., St. Paul, MN, United States	
	Hans, Jeremy, Madison, WI, United States	
	Stohlmeyer, Michelle, Dubuque, IA, United States	
PATENT ASSIGNEE(S):	Research Corporation Technologies, Inc., Tucson, AZ, United States (U.S. corporation)	

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5605994		19970225
APPLICATION INFO.:	US 1995-466160		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-317433, filed on 3 Oct 1994 which is a continuation-in-part of Ser. No. US 1993-130330, filed on 1 Oct 1993, now patented, Pat. No. US 5455359		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Schofer, Joseph L.		
ASSISTANT EXAMINER:	Cheng, Wu C.		
LEGAL REPRESENTATIVE:	Scully, Scott, Murphy & Presser		
NUMBER OF CLAIMS:	52		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1509		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			
AB	The present invention relates to bis-imidazolyl compounds of the formula: ##STR1## and polymers having the above-identified bis-imidazolyl compounds as a polymerizable unit. The present invention further relates to a method for scavenging trace quantities of metal ions from various effluents sources using the polymers of the instant invention. The instant invention also is directed to the use of the above-identified polymers as corrosion inhibiting agents and as a film for use in gel electrophoresis.		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 12 OF 18 USPATFULL on STN

ACCESSION NUMBER: 96:82692 USPATFULL

TITLE: Substituted 6,11-ethano-6,11-dihydrobenzo[b]
quinolizinium salts and compositions and methods of
use thereofINVENTOR(S): DeHaven-Hudkins, Diane L., West Pikeland Township,
Chester County, PA, United States
Dority, Jr., John A., Upper Providence Township,
Montgomery County, PA, United States
Earley, William G., East Vincent Township, Chester
County, PA, United States
Kumar, Virendra, Tredyffrin Township, Chester
County, PA, United States
Mallamo, John P., Uwchlan Township, Chester County,
PA, United States
Miller, Matthew S., Lower Makefield Township, Bucks
County, PA, United States
Subramanyam, Chakrapani, Towamencin Township,
Montgomery County, PA, United StatesPATENT ASSIGNEE(S): Sterling Winthrop Inc., New York, NY, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5554620		19960910
APPLICATION INFO.:	US 1994-283317		19940729 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-121127, filed on 14 Sep 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Tucker, Philip		
ASSISTANT EXAMINER:	Scalzo, Catherine Kilby		
LEGAL REPRESENTATIVE:	Alexander, Michael D., Dupont, Paul E.		
NUMBER OF CLAIMS:	53		
EXEMPLARY CLAIM:	1		
LINE COUNT:	7548		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Substituted 6,11-ethano-6,11-dihydrobenzo[b]quinolizinium salts,
pharmaceutical compositions containing them, and methods for the
treatment of neurodegenerative disorders or neurotoxic injuries
utilizing them, wherein the substituted 6,11-ethano-6,11-
dihydrobenzo[b]quinolizinium salts have the formula: ##STR1##
wherein: R.sup.1, R.sup.2, R.sup.3, R.sup.4, R.sup.5, R.sup.6,
R.sup.7, X and p are as defined in the specification.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 13 OF 18 USPATFULL on STN

ACCESSION NUMBER: 95:88573 USPATFULL

TITLE: Metal ion binding monomer and polymer

INVENTOR(S): Ippoliti, J. Thomas, St. Paul, MN, United States
Mabbott, Gary A., St. Paul, MN, United States
Hans, Jeremy, Madison, WI, United States
Stohlmeyer, Michelle, Dubuque, IA, United StatesPATENT ASSIGNEE(S): Research Corporation Technologies, Inc., Tucson,
AZ, United States (U.S. corporation)

NUMBER	KIND	DATE
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Searcher : Shears 571-272-2528

10/757148

PATENT INFORMATION: US 5455359 19951003
APPLICATION INFO.: US 1993-130330 19931001 (8)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schofer, Joseph L.
ASSISTANT EXAMINER: Cheng, Wu C.
LEGAL REPRESENTATIVE: Scully, Scott, Murphy & Presser
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 838

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to bis-imidazolyl compounds of the formula: ##STR1## and polymers having the above-identified bis-imidazolyl compounds as a polymerizable unit. The present invention further relates to a method for scavenging trace quantities of metal ions from various effluents sources using the polymers of the instant invention. The instant invention also is directed to the use of the above-identified polymers as corrosion inhibiting agents and as a film for use in gel electrophoresis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 14 OF 18 USPATFULL on STN
ACCESSION NUMBER: 94:100006 USPATFULL
TITLE: High relaxivity, paramagnetic, metal clusters for magnetic resonance imaging
INVENTOR(S): Beaty, Julie A., Florissant, MO, United States
Deutsch, Edward A., Maryland Heights, MO, United States
Nosco, Dennis L., Florissant, MO, United States
PATENT ASSIGNEE(S): Mallinckrodt Medical, Inc., St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5364953		19941115
APPLICATION INFO.:	US 1992-971789		19921105 (7)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Cintins, Marianne M.		
ASSISTANT EXAMINER:	Spivack, Phyllis G.		
LEGAL REPRESENTATIVE:	Stierwalt, Brian K.		
NUMBER OF CLAIMS:	7		
EXEMPLARY CLAIM:	1		
LINE COUNT:	448		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel compounds for use as imaging agents. In particular, the present invention relates to paramagnetic metal clusters having oxygen and/or nitrogen containing ligands useful as contrast agents for magnetic resonance imaging (MRI).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 15 OF 18 USPATFULL on STN
ACCESSION NUMBER: 89:80554 USPATFULL
TITLE: Bis imidazole ethers as metal deactivators
INVENTOR(S): Gorun, Sergiu M., Upper Montclair, NJ, United States
Frankenfeld, John W., Hoboken, NJ, United States

10/757148

PATENT ASSIGNEE(S): Exxon Research and Engineering Company, Florham Park, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4869838		19890926
APPLICATION INFO.:	US 1988-236573		19880825 (7)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Schwartz, Richard A.		
LEGAL REPRESENTATIVE:	Dvorak, Joseph J.		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	5		
LINE COUNT:	257		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Bis imidazole ethers have been found to be effective metal deactivators. Thus, one aspect of the present invention comprises novel bis imidazole ethers of the formula: ##STR1## in which R is a normal alkyl group having from 1 to 12 carbon atoms and R' is a normal alkyl group having from 1 to carbon atoms, an alkylaryl group having from 7 to 20 carbon atoms, or an aryl group of 6 to 10 carbon atoms. In another aspect of the present invention, an improved lubricating oil is provided comprising a base lubricating oil and the bis imidazole ethers of this invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 16 OF 18 USPATFULL on STN

ACCESSION NUMBER: 86:71505 USPATFULL
TITLE: Light-sensitive composition having a tetrakisazo compound
INVENTOR(S): Makino, Naonori, Kanagawa, Japan
Sano, Kenji, Kanagawa, Japan
Horie, Seiiji, Kanagawa, Japan
Sato, Hideo, Kanagawa, Japan
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Kanagawa, Japan
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4629672		19861216
APPLICATION INFO.:	US 1985-797553		19851113 (6)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1984-239217	19841113
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Goodrow, John L.	
LEGAL REPRESENTATIVE:	Sughrue, Mion, Zinn, Macpeak, and Seas	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)	
LINE COUNT:	1303	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A light-sensitive composition is disclosed, containing at least one of tetrakisazo compounds having the following general formula [1]: ##STR1## wherein Cp represents a coupler residue; A is a single bond, ##STR2## in which n is an integer of from 1 to 3, or a divalent aromatic organic residue, and B.sup.1 and B.sup.2 each

represents a hydrogen atom or an electron attractive group; Z represents ##STR3## --O--, --S-- or --Se--, in which R.sup.6 represents a hydrogen atom, a substituted or unsubstituted lower alkyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted alkoxycarbonyl group, a substituted or unsubstituted aryloxycarbonyl group or a substituted or unsubstituted acyl group; and Ar represents a substituted or unsubstituted divalent aromatic carbon ring group, or a substituted or unsubstituted divalent heterocyclic aromatic ring group.

An electrophotographic light-sensitive material is also disclosed, comprising an electrically conductive support and a layer containing an electric charge carrier transporting compound and the tetrakisazo compound as an electric charge carrier generating compound.

An electrophotographic light-sensitive material is further disclosed, comprising an electrically conductive support, an electric charge carrier transporting layer containing an electric charge carrier transporting compound, and an electric charge carrier generating layer containing the tetrakisazo compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 17 OF 18 USPATFULL on STN

ACCESSION NUMBER: 80:35625 USPATFULL

TITLE: Imidazolyl-(2)-carbinols having hypolipidemic action and process for preparing them

INVENTOR(S): Gebert, Ulrich, Kelkheim, Germany, Federal Republic of
Granzer, Ernold, Kelkheim, Germany, Federal Republic of

PATENT ASSIGNEE(S): Hoechst Aktiengesellschaft, Frankfurt, Germany,
Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4213994		19800722
APPLICATION INFO.:	US 1979-6203		19790124 (6)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1973-351523, filed on 16 Apr 1973, now abandoned which is a continuation-in-part of Ser. No. US 1972-318110, filed on 26 Dec 1972, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1971-2164919	19711228
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Trousos, Natalie	
LEGAL REPRESENTATIVE:	Curtis, Morris & Safford	
NUMBER OF CLAIMS:	25	
EXEMPLARY CLAIM:	1,22	
LINE COUNT:	603	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Pharmaceutical preparations having hypolipidemic activity, which contain in addition to a pharmaceutically acceptable carrier an effective amount of an imidazolyl-(2)-carbinol of the general formula I ##STR1## in which R represents hydrogen, lower alkyl, phenyl or benzyl, R.sub.1 and R.sub.2 each represent hydrogen or together the group --CH.dbd.CH--CH.dbd.CH--, R.sub.3 and R.sub.4

represent hydrogen, lower alkyl, phenyl, lower haloalkyl, lower alkylphenyl, lower alkoxyphenyl, lower haloalkoxyphenyl, mono- or dihalophenyl, imidazolyl or benzylimidazolyl or R.sub.3 and R.sub.4 are together fluoryl of the formula ##STR2## or of a physiologically tolerable acid addition salt thereof, and process for preparing them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 18 OF 18 USPATFULL on STN

ACCESSION NUMBER: 74:29743 USPATFULL

TITLE: IMIDAZOLYL-KETOXIME-CARBAMATES

INVENTOR(S): Regel, Erik, Wuppertal-Elberfeld, Germany, Federal Republic of
 Buchel, Karl Heinz, Wuppertal-Elberfeld, Germany, Federal Republic of
 Hammann, Ingeborg, Cologne, Germany, Federal Republic of
 Unterstenhofer, Gunter, Opladen, Germany, Federal Republic of

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 3818029		19740618
APPLICATION INFO.:	US 1972-215437		19720104 (5)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1971-2101111	19710112
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Trousof, Natalie	
LEGAL REPRESENTATIVE:	Burgess, Dinklage & Sprung	
NUMBER OF CLAIMS:	7	
LINE COUNT:	561	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Imidazolyl-ketoxime-carbamates of the general formula ##SPC1##

In which

X and Y each independently is hydrogen, halogen, methyl, ethyl or optionally substituted aryl, or

X and Y together constitute a (CH).sub.4 group forming a fused benzene ring with the two imidazole-ring carbon atoms to which they are attached,

R and R" each independently is alkyl or alkenyl with up to 6 carbon atoms; or aryl or aralkyl optionally carrying at least one halogen, nitro or alkyl substituent,

R' is alkyl, haloalkyl, optionally substituted aryl or a five- or six-membered heteroaromatic ring optionally carrying at least one halogen, alkyl, aryl or substituted aryl substituent, and

R'" is hydrogen, or alkyl or alkenyl with up to four carbon atoms, which possess insecticidal, acaricidal and bactericidal properties.

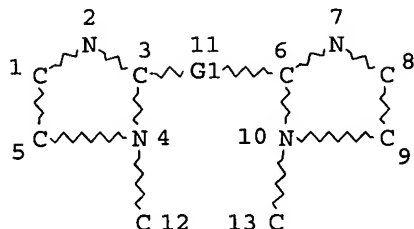
10/757148

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

FILE 'HOME' ENTERED AT 14:53:21 ON 18 MAY 2006

10/757148

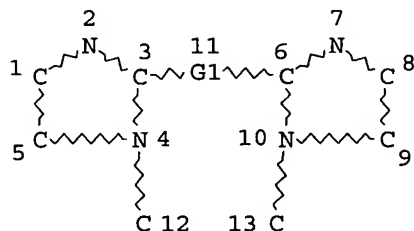
=> d que stat l5; d his ful
L2 STR



REP G1=(1-3) C
NODE ATTRIBUTES:
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 7
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
L3 (478)SEA FILE=REGISTRY SSS FUL L2
L4 STR



REP G1=(1-3) C
NODE ATTRIBUTES:
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 7
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
L5 281 SEA FILE=REGISTRY SUB=L3 SSS FUL L4

100.0% PROCESSED 281 ITERATIONS
SEARCH TIME: 00.00.01

281 ANSWERS

(FILE 'HOME' ENTERED AT 14:38:51 ON 18 MAY 2006)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 14:39:15 ON 18 MAY 2006
L1 331064 SEA ABB=ON PLU=ON ?NICKEL?/CNS

Searcher : Shears 571-272-2528

10/757148

ACT SHIA/A

L2 STR
L3 (478) SEA SSS FUL L2
L4 STR
L5 281 SEA SUB=L3 SSS FUL L4

FILE 'CAPLUS' ENTERED AT 14:39:58 ON 18 MAY 2006

L6 3 SEA ABB=ON PLU=ON (ITAHASHI T? AND KAMIKAWA ?)/AU
D AN 2
SEL L6 2 RN

FILE 'REGISTRY' ENTERED AT 14:40:58 ON 18 MAY 2006

L7 62 SEA ABB=ON PLU=ON (7440-02-0/BI OR 10541-56-7/BI OR
108-85-0/BI OR 110-71-4/BI OR 111-83-1/BI OR 111-85-3/BI
OR 124225-99-6/BI OR 128796-39-4/BI OR 1295-35-8/BI OR
13187-99-0/BI OR 144025-03-6/BI OR 149104-90-5/BI OR
1692-25-7/BI OR 17734-25-7/BI OR 2189-60-8/BI OR 2719-61-1/
BI OR 3208-25-1/BI OR 32316-92-0/BI OR 3307-19-5/BI OR
337465-52-8/BI OR 39195-68-1/BI OR 41446-55-3/BI OR
4406-77-3/BI OR 54550-36-6/BI OR 55552-70-0/BI OR 55944-70-
2/BI OR 5720-07-0/BI OR 59239-44-0/BI OR 629-27-6/BI OR
6783-05-7/BI OR 6962-92-1/BI OR 71905-35-6/BI OR 725251-79-
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OR 725251-84-3/BI OR 725251-85-4/BI OR 725251-86-5/BI OR
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725252-01-7/BI OR 725252-02-8/BI OR 725252-03-9/BI OR
725252-04-0/BI OR 7440-42-8/BI OR 7492-40-2/BI OR 7778-53-2
/BI OR 7791-20-0/BI OR 827-52-1/BI OR 98-80-6/BI OR
98437-24-2/BI)
L8 3 SEA ABB=ON PLU=ON L7 AND NI=>1
D SCAN
D L1 RN 10000
L9 10000 SEA RAN=(853655-59-1,) ABB=ON PLU=ON ?NICKEL?/CNS
L10 QUE ABB=ON PLU=ON L2

FILE 'HOME' ENTERED AT 14:42:52 ON 18 MAY 2006

FILE 'REGISTRY' ENTERED AT 14:45:10 ON 18 MAY 2006

L11 0 SEA ABB=ON PLU=ON L1 AND L5
D COST
D L1 100000
D L1 100000 RN
L12 100000 SEA RAN=(187236-37-9,) ABB=ON PLU=ON ?NICKEL?/CNS
L13 231065 SEA RAN=(,187236-37-9) ABB=ON PLU=ON ?NICKEL?/CNS

FILE 'CAPLUS' ENTERED AT 14:47:26 ON 18 MAY 2006

L14 35444 SEA ABB=ON PLU=ON L12
L15 751158 SEA ABB=ON PLU=ON L13
L16 10 SEA ABB=ON PLU=ON L5 AND (L14 OR L15 OR NI OR NICKEL)

FILE 'REGISTRY' ENTERED AT 14:51:33 ON 18 MAY 2006

D QUE STAT L5

FILE 'CAPLUS' ENTERED AT 14:51:33 ON 18 MAY 2006

D 1-10 IBIB ABS HITSTR

Searcher : Shears 571-272-2528

10/757148

L17 FILE 'CAOLD' ENTERED AT 14:51:42 ON 18 MAY 2006
3 SEA ABB=ON PLU=ON L5
D 1-3

L18 FILE 'USPATFULL' ENTERED AT 14:52:19 ON 18 MAY 2006
18 SEA ABB=ON PLU=ON L5
D L18 1-18 IBIB ABS

FILE 'HOME' ENTERED AT 14:53:21 ON 18 MAY 2006
D QUE STAT L5

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 MAY 2006 HIGHEST RN 884739-24-6
DICTIONARY FILE UPDATES: 17 MAY 2006 HIGHEST RN 884739-24-6

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TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

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*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMI for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

FILE CAPLUS

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10/757148

FILE COVERS 1907 - 18 May 2006 VOL 144 ISS 21
FILE LAST UPDATED: 17 May 2006 (20060517/ED)

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<http://www.cas.org/infopolicy.html>

FILE CAOLD
FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

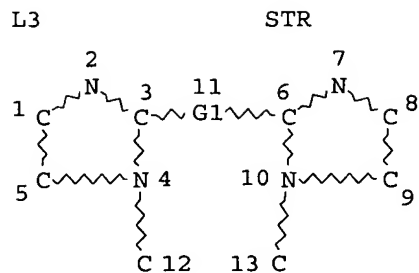
This file contains CAS Registry Numbers for easy and accurate
substance identification. Title keywords, authors, patent
assignees, and patent information, e.g., patent numbers, are
now searchable from 1907-1966. TIFF images of CA abstracts
printed between 1907-1966 are available in the PAGE
display formats.

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This file supports REGISTRY for direct browsing and searching of
all substance data from the REGISTRY file. Enter HELP FIRST for
more information.

FILE USPATFULL
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 18 May 2006 (20060518/PD)
FILE LAST UPDATED: 18 May 2006 (20060518/ED)
HIGHEST GRANTED PATENT NUMBER: US7047565
HIGHEST APPLICATION PUBLICATION NUMBER: US2006107430
CA INDEXING IS CURRENT THROUGH 18 May 2006 (20060518/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 18 May 2006 (20060518/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2006
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2006

10/757148



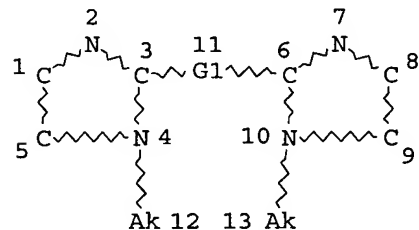
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RSPEC I
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L12 53 SEA FILE=MARPAT SSS FUL L3 (MODIFIED ATTRIBUTES)
L13 STR



REP G1=(1-3) CH2
NODE ATTRIBUTES:
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DEFAULT ECLEVEL IS LIMITED

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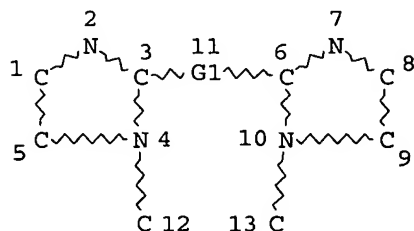
L14 23 SEA FILE=MARPAT SUB=L12 SSS FUL L13 (MODIFIED ATTRIBUTES)

10/757148

100.0% PROCESSED 53 ITERATIONS
SEARCH TIME: 00.00.01

23 ANSWERS

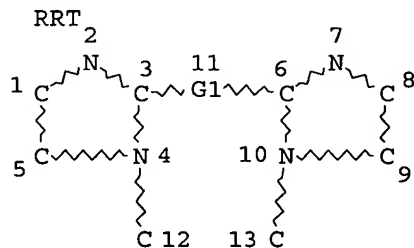
L3 STR



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CONNECT IS X2 RC AT 7
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
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L17 STR

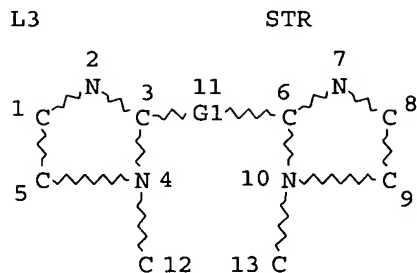


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NODE ATTRIBUTES:
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
L18 45 SEA FILE=CASREACT SUB=L16 SSS FUL L17 (310 REACTIONS)

100.0% DONE 310 VERIFIED 310 HIT RXNS 45 DOCS
SEARCH TIME: 00.00.01



REP G1=(1-3) C
 NODE ATTRIBUTES:
 CONNECT IS X2 RC AT 2
 CONNECT IS X2 RC AT 7
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RSPEC I
 NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
 L27 9 SEA L3

(FILE 'REGISTRY' ENTERED AT 12:57:13 ON 18 MAY 2006)
 DEL HIS Y
 ACT SHIA/A

L1 STR
 L2 (478) SEA FILE=REGISTRY SSS FUL L1
 L3 STR
 L4 281 SEA FILE=REGISTRY SUB=L2 SSS FUL L3

 E NICKEL/CN 5
 L5 1 S E3

FILE 'MARPAT' ENTERED AT 13:00:43 ON 18 MAY 2006
 D L3
 L11 1 SEA SSS SAM L3 (MODIFIED ATTRIBUTES)
 L12 53 SEA SSS FUL L3 (MODIFIED ATTRIBUTES)
 L*** DEL 26 S L5 OR NICKEL OR NI
 D KWIC
 L*** DEL 0 S L12 AND L13
 L13 STR L3
 L14 23 SEA SUB=L12 SSS FUL L13 (MODIFIED ATTRIBUTES)
 D QUE STAT
 D 1-23 .BEVMAR1

FILE 'CASREACT' ENTERED AT 13:04:41 ON 18 MAY 2006
 L15 3 SEA SSS SAM L3 (13 REACTIONS)
 L16 47 SEA SSS FUL L3 (483 REACTIONS)
 D FHIT
 L17 STR L3
 L18 45 SEA SUB=L16 SSS FUL L17 (310 REACTIONS)
 D FHIT
 D FHIT 2
 L19 1130 SEA ABB=ON PLU=ON L5/RRT

10/757148

L20 0 SEA ABB=ON PLU=ON L18 AND L19
L21 0 SEA ABB=ON PLU=ON L18 AND L5
L22 7000 SEA ABB=ON PLU=ON L5
 D L19
L23 5910 SEA ABB=ON PLU=ON L5/CAT
 D FHIT
L24 0 SEA ABB=ON PLU=ON L18 AND L23
L25 4233 SEA ABB=ON PLU=ON (NICKEL OR NI)/NTE
L26 0 SEA ABB=ON PLU=ON L18 AND L25
 D QUE STAT L24
 D QUE STAT L26

FILE 'DJSMD5, CHEMINFORMRX' ENTERED AT 13:10:15 ON 18 MAY 2006

L27 9 SEA ABB=ON PLU=ON L3
 D FHIT
L28 67 SEA ABB=ON PLU=ON 7440-02-0/CAT
L29 19 SEA ABB=ON PLU=ON (NICKEL OR NI)/NTE
L30 0 SEA ABB=ON PLU=ON L27 AND (L28 OR L29)
 D QUE STAT

FILE 'HOME' ENTERED AT 13:12:53 ON 18 MAY 2006

D QUE STAT L4
D QUE STAT L14
D QUE STAT L18
D QUE STAT L27

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 16 MAY 2006 HIGHEST RN 884586-69-0

DICTIONARY FILE UPDATES: 16 MAY 2006 HIGHEST RN 884586-69-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMI for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

FILE CAPLUS

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FILE COVERS 1907 - 18 May 2006 VOL 144 ISS 21
FILE LAST UPDATED: 17 May 2006 (20060517/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

FILE CAOLD

FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 18 May 2006 (20060518/PD)
FILE LAST UPDATED: 18 May 2006 (20060518/ED)
HIGHEST GRANTED PATENT NUMBER: US7047565
HIGHEST APPLICATION PUBLICATION NUMBER: US2006107430
CA INDEXING IS CURRENT THROUGH 18 May 2006 (20060518/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 18 May 2006 (20060518/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2006
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2006

FILE MEDLINE

FILE LAST UPDATED: 17 MAY 2006 (20060517/UP). FILE COVERS 1950 TO DA

On December 11, 2005, the 2006 MeSH terms were loaded.

The MEDLINE reload for 2006 is now (26 Feb.) available. For details on the 2006 reload, enter HELP RLOAD at an arrow prompt (=>). See also:

<http://www.nlm.nih.gov/mesh/>
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_med_data_changes.html

10/757148

http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_2006_MeSH.html

OLDMEDLINE is covered back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2006 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 17 May 2006 (20060517/ED)

FILE EMBASE

FILE COVERS 1974 TO 18 May 2006 (20060518/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE MARPAT

FILE CONTENT: 1961-PRESENT VOL 144 ISS 20 (20060512/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US	2006062725	23	MAR	2006
DE	102004042453	02	MAR	2006
EP	1630164	01	MAR	2006
JP	2006066320	09	MAR	2006
WO	2006034632	06	APR	2006
GB	2416167	18	JAN	2006
FR	2875804	31	MAR	2006
RU	2270725	27	FEB	2006
CA	2514373	19	FEB	2006

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

FILE CASREACT

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FILE CONTENT:1840 - 14 May 2006 VOL 144 ISS 20

10/757148

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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*****
*
*      CASREACT now has more than 10 million reactions
*
*****
```

Some CASREACT records are derived from the ZIC/VINITI database (1974-1 provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE DJSMD5

FILE LAST UPDATED: 08 MAR 2006 <20060308/UP>

```
>>> DERWENT JOURNAL OF SYNTHETIC METHODS - DERWENT SUBSCRIBER FILE >>>
>>> FILE COVERS 1975 TO 2004 DATA <<<
>>> GRAPHIC IMAGES OF THE PRINTED DERWENT JOURNAL OF SYNTHETIC
      METHODS ARE AVAILABLE FROM 1975 TO 2004 <<<
>>> PLEASE NOTE: IN DJSMD HYDROGEN BONDS CANNOT BE DEFINED AS
      REACTION SITES <<<
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FILE CHEMINFORMRX

FILE LAST UPDATED: 8 MAR 2006 <20060308/UP>

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>>> CAS Registry Numbers are available for
      substances prior to 1995 <<<
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FILE HOME

10/757148

(FILE 'REGISTRY' ENTERED AT 12:57:13 ON 18 MAY 2006)

DEL HIS Y
ACT SHIA/A

L1 STR
L2 (478) SEA FILE=REGISTRY SSS FUL L1
L3 STR
L4 281 SEA FILE=REGISTRY SUB=L2 SSS FUL L3

E NICKEL/CN 5
L5 1 S E3

10/757148

FILE 'MARPAT' ENTERED AT 13:00:43 ON 18 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE CONTENT: 1961-PRESENT VOL 144 ISS 20 (20060512/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

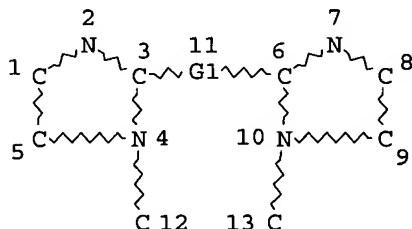
MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 2006062725 23 MAR 2006
DE 102004042453 02 MAR 2006
EP 1630164 01 MAR 2006
JP 2006066320 09 MAR 2006
WO 2006034632 06 APR 2006
GB 2416167 18 JAN 2006
FR 2875804 31 MAR 2006
RU 2270725 27 FEB 2006
CA 2514373 19 FEB 2006

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

L3 STR



REP G1=(1-3) C
NODE ATTRIBUTES:
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 7
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

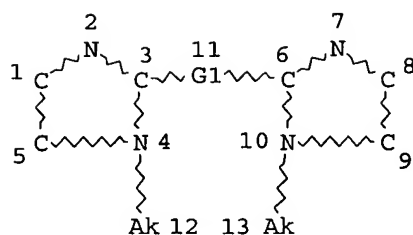
GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L12 53 SEA FILE=MARPAT SSS FUL L3 (MODIFIED ATTRIBUTES)
L13 STR

10/757148



REP G1=(1-3) CH2
NODE ATTRIBUTES:
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 7
DEFAULT MLEVEL IS ATOM
MLEVEL IS CLASS AT 12 13
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L14 23 SEA FILE=MARPAT SUB=L12 SSS FUL L13 (MODIFIED ATTRIBUTES)

100.0% PROCESSED 53 ITERATIONS 23 ANSWERS
SEARCH TIME: 00.00.01

L14 ANSWER 1 OF 23 MARPAT COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 143:472649 MARPAT
TITLE: Diarylalkanes as potent inhibitors of binuclear
enzymes
INVENTOR(S): Jia, Qi; Zhao, Ji-Fu
PATENT ASSIGNEE(S): Unigen Pharmaceuticals, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 39 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005267047	A1	20051201	US 2005-139200	20050527
WO 2005117849	A1	20051215	WO 2005-US18884	20050527
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,			

Searcher : Shears 571-272-2528

10/757148

DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC,
NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-575599P 20040528

AB The present invention implements a strategy that combines an enzyme inhibition assay with a chemical dereplication process to identify active plant exts. and the particular compds.-diarylalkanes and/or diarylalkanols within those exts. that specifically inhibit binuclear enzyme function. Included in the present invention are compns. of matter comprised of one or more of diarylalkanes and/or diarylalkanols, which inhibit the activity of binuclear enzymes, particularly tyrosinase and which prevent melanin overprodn. The present invention also provides a method for inhibiting the activity of a binuclear enzyme, particularly tyrosinase and a method for preventing and treating diseases and conditions related to binuclear enzyme function. The present invention further includes a method for preventing and treating melanin overprodn. and diseases and conditions of the skin related thereto. The method for preventing and treating diseases and conditions related to binuclear enzyme function and melanin overprodn. is comprised of administering to a host in need thereof an effective amount of a composition comprising one or more diarylalkanes and/or diarylalkanols synthesized and/or isolated from one or more plants together with a pharmaceutically acceptable carrier.

L14 ANSWER 2 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 141:140167 MARPAT

TITLE: Method for preparing Suzuki coupling compounds, in particular alkylarenes, in the presence of a base and a catalytic system comprising a Ni compound and a bisimidazolium derivative

INVENTOR(S): Itahashi, Tamon; Kamikawa, Takashi

PATENT ASSIGNEE(S): Sumitomo Chemical Co.,ltd., Japan

SOURCE: Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

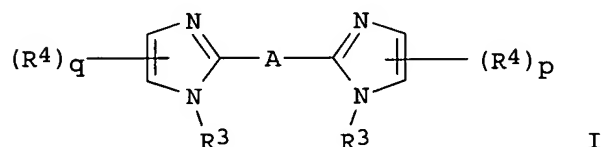
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1439157	A2	20040721	EP 2004-250196	20040115
EP 1439157	A3	20041020		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004269486	A2	20040930	JP 2003-111282	20030416
US 2004161404	A1	20040819	US 2004-757148	20040114
PRIORITY APPLN. INFO.:			JP 2003-9637	20030117
			JP 2003-111282	20030416

GI



AB The invention is directed to a method for producing a cross-coupling compound of formula $Y a R_1 R_2 (R_1)_b$ by Suzuki cross-coupling of an organic halide of formula $n' (R_1 X)_n$ with a boron compound of formula $m [R_2 (B X_2)_2] n'$ in the presence of a base and a catalytic system comprising a Ni compound and a bisimidazolium compound I [wherein R_1 = (un)substituted linear, branched, or cyclic hydrocarbyl; a, b = independently 1 or 2; provided that when $n = n'$, both n and n' are not 2; R_2 = (un)substituted heteroaryl, alkenyl; $Y = R_2, X_1$; $X_1 = Cl, Br, I$; carbon atoms at the α and β positions relative to X_1 in the halide are sp^3 carbons; X_2 = independently OH and derivs., or $X_{22} =$ alkylenedioxy or arylenedioxy; $m = 1-2$; $m \leq n$; $R_3 =$ (un)substituted alkyl; $R_4 = H$, (un)substituted alkyl; $A = (CH_2)_1$; $1 = 1-3$; $p, q =$ independently 0-2]. The method eliminates the use of expensive Pd phosphine complexes. Ni compds. include Ni salts and π -complexes of zero-valent or divalent Ni. Thus, Suzuki cross-coupling of p-methoxyphenylboronic acid with 1-bromooctane in the presence of K_3PO_4 /bis(1,5-cyclooctadiene)nickel/bis(N-methylimidazol-2-yl)methane in an argon atmosphere at 80° for 2 h gave 4-octylanisole in 87% yield.

L14 ANSWER 3 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 140:199331 MARPAT

TITLE: Preparation of five-membered heterocyclic compounds as mGluR5 receptor antagonists

INVENTOR(S): Wensbo, David; Xin, Tao; Stefanac, Tomislav; Arora, Jalaj; Edwards, Louise; Isaac, Methvin; Slassi, Abdelmalik; Stormann, Thomas M.; McLeod, Donald A.; Kers, Annika; Malmberg, Johan; Oscarsson, Karin; Gyback, Helena; Johansson, Martin; Minidis, Alexander; Waldman, Mangus; Yngve, Ulrika; Osterwall, Christoffer

PATENT ASSIGNEE(S): Astra Zeneca Ab, Swed.; NPS Pharmaceuticals, Inc.

SOURCE: PCT Int. Appl., 318 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

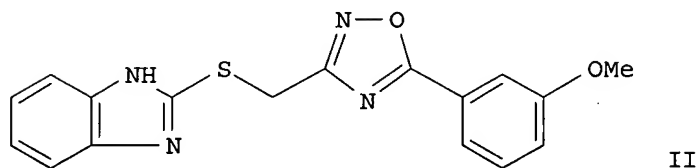
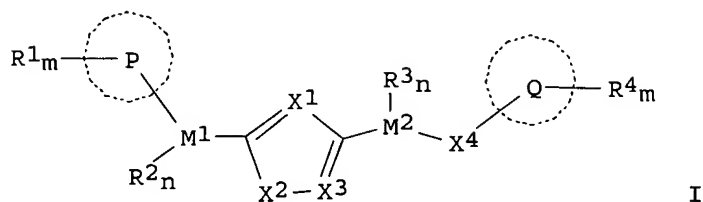
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004014881	A2	20040219	WO 2003-US24846	20030808
WO 2004014881	A3	20040527		
WO 2004014881	B1	20040715		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2494987	AA	20040219	CA 2003-2494987	20030808
AU 2003259068	A1	20040225	AU 2003-259068	20030808
US 2004152699	A1	20040805	US 2003-637012	20030808

10/757148

EP 1529045	A2	20050511	EP 2003-785036	20030808
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,				
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003013265	A	20050705	BR 2003-13265	20030808
JP 2006503009	T2	20060126	JP 2004-527872	20030808
NO 2005001225	A	20050509	NO 2005-1225	20050309
PRIORITY APPLN. INFO.:			US 2002-402040P	20020809
			WO 2003-US24846	20030808

GI



AB The present invention relates to five-membered heterocyclic compds. (shown as I; variables defined below; e.g. II), a process for their preparation and new intermediates prepared therein, pharmaceutical formulations containing said compds. and to the use of said compds. in therapy, e.g. neurol., psychiatric and chronic and acute pain disorders (no data). Typical IC₅₀ values for mGluR5 receptor antagonist activity are ≤10 μM; no values for individual compds. are given. Methods of preparation are claimed and example preps. and/or characterization data are included for apprx.800 examples of I and intermediates. For example, [3-[3-[[[4-methyl-5-(thiophen-2-yl)-4H-[1,2,4]triazol-3-yl]sulfanyl]methyl][1,2,4]oxadiazol-5-yl]phenyl]carbamic acid tert-Bu ester was prepared in 79% yield by condensation of 4-methyl-5-(thiophen-2-yl)-4H-[1,2,4]triazole-3-thiol with [3-(3-chloromethyl-[1,2,4]oxadiazol-5-yl)phenyl]carbamic acid tert-Bu ester in MeCN in the presence of K₂CO₃. For I: P = H, C3-7alkyl or a 3- to 8-membered ring containing ≥1 atoms = C, N, O and S, which ring may optionally be fused with a 5- or 6-membered ring containing ≥1 C, N, O and S; R₁ = H, hydroxy, halo, nitro, C1-6-alkylhalo, OC1-6alkylhalo, C1-6alkyl, OC1-6alkyl, C2-6alkenyl, OC2-6alkenyl, C2-6alkynyl, OC2-6alkynyl, C0-6alkylC3-6cycloalkyl, etc. and a 5- or 6-membered ring containing ≥1 C, N, O and S, wherein said ring may be substituted by ≥1 A. M₁ = a bond, C1-3alkyl, C2-3alkenyl, C2-3alkynyl, C0-4alkyl(CO)C0-4alkyl, C0-3alkylOC0-3alkyl, C0-3alkyl(CO)NR₅, C0-3alkyl(CO)NR₅C0-3alkyl, C0-4-alkylNR₅, C0-3alkylSC0-3alkyl, etc.; R₂ = H, hydroxy, C0-6alkylcyano, oxo, NR₅, NOR₅, C1-4alkylhalo, halo, C1-4alkyl, etc. X₁, X₂ and X₃ = CR, CO, N, NR, O and S; R = H, C0-3alkyl, halo, C0-3alkylOR₅, C0-3-alkylNR₅R₆, C0-3alkyl(CO)OR₅, C0-3alkylNR₅R₆ and C0-3alkylaryl; M₂ = a bond, C1-3alkyl, C3-7cycloalkyl, C2-3alkenyl, C2-3alkynyl, C0-4alkyl(CO)C0-4alkyl, C0-3alkylOC0-3alkyl, etc.; R₃ = H, hydroxy,

C0-6alkylcyano, oxo, NR, NOR5, C1-4alkylhalo, halo, C1-4alkyl, etc.
 X4 = C0-4alkylR5, C0-4alkyl(NR5R6), C0-4-alkyl(NR5R6):N,
 NR5C0-4alkyl(NR5R6):N, NOC0-4alkyl, C1-4alkylhalo, C, O, SO, SO2 and
 S; Q is a 5- or 6-membered ring containing ≥ 1 C, N, O and S, which
 group may optionally be fused with a 5- or 6-membered ring containing
 ≥ 1 C, N, O and S and which fused ring may be substituted by
 ≥ 1 A. R4 = H, hydroxy, C0-6alkylcyano, oxo, NR5, NOR5,
 C1-4alkylhalo, halo, C1-4alkyl, OC1-4alkyl, OC0-6alkylaryl, etc. and a
 5- or 6-membered ring containing ≥ 1 atoms = C, N, O or S, wherein
 said ring may be substituted by ≥ 1 A; R5, R6 = H, OH,
 C1-6alkyl, etc.; A = H, OH, O, halo, nitro, C0-6alkylcyano, etc.; m =
 0-4; and n = 0-3; addnl. details are given in the claims.

✓ L14 ANSWER 4 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 140:103203 MARPAT
 TITLE: Solid support comprising a functionalized
 conducting or semiconducting surface of
 electricity, its preparation process, and its uses
 INVENTOR(S): Bureau, Christophe; Mouanda, Brigitte; Ameur,
 Sami; Charlier, Julianne; Palacin, Serge
 PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.
 SOURCE: Fr. Demande, 56 pp.
 CODEN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2841908	A1	20040109	FR 2002-8381	20020704
FR 2841908	B1	20040924		
CA 2491589	AA	20040115	CA 2003-2491589	20030616
WO 2004005410	A1	20040115	WO 2003-FR1814	20030616
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003263238	A1	20040123	AU 2003-263238	20030616
BR 2003012460	A	20050426	BR 2003-12460	20030616
EP 1551928	A1	20050713	EP 2003-762703	20030616
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005531678	T2	20051020	JP 2004-518831	20030616
US 2005272143	A1	20051208	US 2005-518923	20050712
PRIORITY APPLN. INFO.:			FR 2002-8381	20020704
			WO 2003-FR1814	20030616

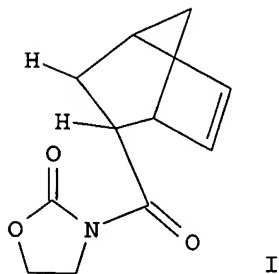
AB The present invention relates to a functionalized solid support
 comprising a conducting or semiconductor surface of the electricity
 covered with a functionalized electro-grafted organic layer within which
 at least 90 % of the number of the functional groups of interest are
 accessible, with the method of preparation of such a support, like with its
 uses, in particular on a primary basis of adhesion for the fixing of

mols. of interest or objects carrying a complementary function ("mol. Velcro"). Claims include applications with biomols. and biocompatible surfaces/polymers.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 23 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 138:387140 MARPAT
 TITLE: Heterogeneous Diels-Alder reaction zeolitic catalysts
 INVENTOR(S): Caplan, Neil Aubrey; Hancock, Frederick Ernest
 PATENT ASSIGNEE(S): Johnson Matthey PLC, UK
 SOURCE: PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003039746	A1	20030515	WO 2002-GB4928	20021031
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1444038	A1	20040811	EP 2002-772594	20021031
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2005033100	A1	20050210	US 2004-495004	20040510
PRIORITY APPLN. INFO.:			GB 2001-26935	20011109
			WO 2002-GB4928	20021031
OTHER SOURCE(S):		CASREACT 138:387140		
GI				



AB A process for performing a catalytic Diels-Alder reaction by reacting

a diene with a dienophile in the presence of a heterogeneous catalyst comprising a zeolitic material exchanged or impregnated with ions of a Lewis acidic metal is described. The catalyst, for example, copper-exchanged zeolite Y, may be treated with chiral bis(imine) compds. to direct the chirality of the reaction products. The catalyst can be separated from the reaction mixture and re-used in further Diels Alder reactions. Thus, 0.025 g acrylimide(3-(2-propenoyl)-2-oxazolidinone) in 4.0 mL DCM and 0.90 g freshly distilled cyclopentadiene were agitated at -78° for 3 h in the presence of copper-exchanged zeolite Y and 2,2'-isopropyldiene bis[4(S)-4-tert-butyl-2-oxazoline] to give the desired product (I).

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 138:304526 MARPAT

TITLE: Preparation of amino acid amide derivatives as antagonists of chemokine CXCR4 receptor

INVENTOR(S): Yamazaki, Toru; Saitou, Atsushi; Ono, Masahiro; Yokoyama, Sei; Bannai, Kenji; Hirose, Kunitaka; Yanaka, Mikiro

PATENT ASSIGNEE(S): Kureha Chemical Industry Co., Ltd., Japan

SOURCE: PCT Int. Appl., 192 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003029218	A1	20030410	WO 2002-JP10069	20020927
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1431290	A1	20040623	EP 2002-768118	20020927
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
US 2004254221	A1	20041216	US 2004-487718	20040331
PRIORITY APPLN. INFO.:			JP 2001-302584	20010928
			WO 2002-JP10069	20020927

AB Novel nitrogenous compds. represented by general formula A-(CH₂)_{n1}-W-x-CH[(CH₂)_{n2}-B]-y-N(D₁)D₂ [n₁ = an integer of 0-3; n₂ = an integer of 0-4; A = A1-G1-N(R₁), A1-C(R₂)(A₂)-N(R₁) (wherein A₁, A₂ = H, (un)substituted mono- or polycyclic heteroarom. or aromatic ring; G₁ = a single bond, CR₂R₃; wherein R₁-R₃ = each (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, or C3-6 cycloalkyl); W = (un)substituted C1-7 alkylene, C2-7 alkenylene, alkynylene, C3-10 cycloalkylene, or mono- or polycyclic aromatic, heteroarom., or saturated heterocyclic ring; D₁, D₂ = H, G₂-R₄ (wherein G₂ = (un)substituted C1-15 alkylene, C2-7 alkenylene, or C2-7 alkynylene; R₄ = H, each (un)substituted C3-10 cycloalkyl, mono- or polycyclic aromatic, heteroarom., or saturated

heterocyclic ring); B = Q1-C(:Q2)-NHR5, NR6R7 (wherein Q1 = S, O, NH; Q2 = S, O, NR8; R5, R8 = H, (un)substituted lower alkyl, cycloalkyl, or aromatic ring; or R5 and R8 together form a ring; R6, R7 = H, (un)substituted C1-5 alkyl, C3-15 cycloalkyl, C2-15 alkenyl, C2-15 alkynyl, etc.; R6 and R7 together form a ring); x = z1-CO-z2, z1-S(O)m1, z1-CR11R12-z2 (wherein z1, z2 = a single bond, S, O, (un)substituted NH; R11, R12 = H, (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, or C3-6 cycloalkyl); y = CO, SO, SO2] are prepared. These compds. are amino acid amides derivs. such as arginamide and ornithinamide derivs. and are effective against diseases such as HIV viral infectious diseases, rheumatism, and cancerous metastasis. Thus, 0.300 g N-[(1S)-1-(1-naphthyl)ethyl]-5-amino-(S)-2-[[4-[[N-tert-butoxycarbonyl-N-(imidazol-2-ylmethyl)amino]methyl]benzoyl]amino]pentanamide was dissolved in 5 mL MeOH, treated with 0.160 mL isobutyraldehyde, 0.5 mL AcOH, and 0.195 g NaBH3CN, and stirred at room temperature for 2 days, followed by workup, silica gel chromatog., treatment with MeSO3H/CHCl3 for deprotection, and silica gel chromatog., N-[(1S)-1-(1-naphthyl)ethyl]-5-diisobutylamino-(S)-2-[[4-[[N-tert-butoxycarbonyl-N-(imidazol-2-ylmethyl)amino]methyl]benzoyl]amino]pentanamide (I). I in vitro showed EC50 of 0.0067 μ M for inhibiting the cell damage of HIV-1IIIB-infected MT-4 cells and at 0.1 μ M inhibited by 100% the binding of [125I]SDF-1 α to chemokine CXCR4 receptor in MT-4 cells.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

114 ANSWER 7 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 138:206878 MARPAT
 TITLE: Zeolite-immobilized Lewis acid catalysts
 INVENTOR(S): Hancock, Frederick Ernest; Hutchings, Graham John; Caplan, Neil Aubrey
 PATENT ASSIGNEE(S): Johnson Matthey Plc, UK
 SOURCE: PCT Int. Appl., 20 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003018191	A1	20030306	WO 2002-GB3609	20020805
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1419008	A1	20040519	EP 2002-751381	20020805
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
TW 583025	B	20040411	TW 2002-91118787	20020820
US 2004204610	A1	20041014	US 2004-487384	20040526
PRIORITY APPLN. INFO.:			GB 2001-20256	20010821

WO 2002-GB3609 20020805

AB A zeolite-immobilized Lewis acid e.g. copper catalyst for performing carbonyl-ene and imino-ene reactions is described. The catalyst can readily be separated from the reaction mixture and re-used in further reactions with minimal reduction in activity.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 136:369712 MARPAT

TITLE: Bis-heterocyclic (e.g., indolyl, pyrrolyl) compounds with antitumor and chemosensitizing activity

INVENTOR(S): Marzi, Mauro; Minetti, Patrizia; Moretti, Gian Piero; Giannini, Giuseppe; Garattini, Enrico

PATENT ASSIGNEE(S): Sigma-Tau Industrie Farmaceutiche Riunite S.P.A., Italy

SOURCE: PCT Int. Appl., 103 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036561	A1	20020510	WO 2001-IT407	20010726
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
IT 1317925	B1	20030715	IT 2000-RM569	20001103
CA 2427565	AA	20020510	CA 2001-2427565	20010726
AU 2001084392	A5	20020515	AU 2001-84392	20010726
EP 1337511	A1	20030827	EP 2001-963372	20010726
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001015139	A	20030930	BR 2001-15139	20010726
JP 2004513110	T2	20040430	JP 2002-539321	20010726
CN 1733722	A	20060215	CN 2005-10079091	20010726
US 2004053987	A1	20040318	US 2003-415898	20030909
PRIORITY APPLN. INFO.:				
			IT 2000-RM569	20001103
			CN 2001-818293	20010726
			WO 2001-IT407	20010726

GI

reactions, biphasic catalysis media, media for electroluminescent and electrochromic devices. Thus, 1,2-bis(3-methylimidazolium) dibromide was prepared. Data for properties of I were given.

L14 ANSWER 10 OF 23 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 129:262030 MARPAT
 TITLE: Fabric softeners giving no slimy feel
 INVENTOR(S): Imata, Hiroshi; Imai, Hirohito; Fujiwara, Masami
 PATENT ASSIGNEE(S): Lion Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10237761	A2	19980908	JP 1997-37446	19970221
PRIORITY APPLN. INFO.:			JP 1997-37446	19970221

GI

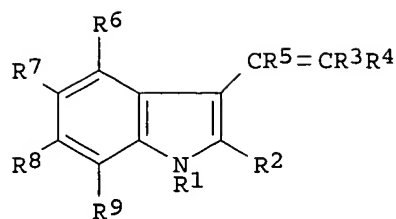
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title softeners contain salts (including quaternary) of I, II, III, and IV, wherein R1 = C9-35 alkyl, alkenyl with or without ether O; A = O, NR2; R2 = H, C1-6 alkyl, hydroxyalkyl; m = 0-10; n, p, q = 2-3. I (n = 2; m = 4; A = NH; R1 = C17H35) hydrochloride was used for cotton towels and acrylic fabrics.

L14 ANSWER 11 OF 23 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 128:75297 MARPAT
 TITLE: Indole compounds and their use in treating diseases of the central nervous system
 INVENTOR(S): Lundbeck, Jane Marie; Kanstrup, Anders
 PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
 SOURCE: U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 509,471.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5696148	A	19971209	US 1996-749520	19961118
US 5536721	A	19960716	US 1995-403357	19950314
US 5783575	A	19980721	US 1995-509471	19950731
PRIORITY APPLN. INFO.:			DK 1994-295	19940314
			US 1995-403357	19950314
			DK 1995-870	19950731
			US 1995-509471	19950731

GI



I

AB Indole compds. I (R1 = alkyl, haloalkyl, alkenyl, cycloalkyl, etc.; R2 = halo, cycloalkylalkyl, cycloalkyl, alkenyl, alkynyl, benzyl, etc.; R3, R4 = H, CN, acyl, carbalkoxy, alkylsulfonyl, etc.; R5 = H, alkyl; R6-9 = H, nitro, amino, halo, trifluoromethyl, etc.) were prepared for treating diseases of the central nervous system related to the metabotropic glutamate receptor system. Thus, Et 2-cyano-3-(1-benzyl-2-chloro-3-indolyl)acrylate was prepared by condensation of 1-benzyl-2-chloro-3-indolecarboxaldehyde in EtOH containing Et3N. The product showed IC50 of 2.2 μ M against PI-hydrolysis in BHK 570 cells expressing mGluR1 α receptors.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 12 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 124:202953 MARPAT

TITLE: N-2 Substituted purines and their use in oligonucleotides and antisense agents

INVENTOR(S): Cook, Phillip Dan; Ramasamy, Kanda S.; Manoharan, Muthiah

PATENT ASSIGNEE(S): Isis Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 256

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9514707	A1	19950601	WO 1994-US13622	19941129
W: JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5459255	A	19951017	US 1993-159088	19931129
EP 731807	A1	19960918	EP 1995-902698	19941129
EP 731807	B1	20040317		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09500398	T2	19970114	JP 1995-515258	19941129
JP 3535519	B2	20040607		
AT 261984	E	20040415	AT 1995-902698	19941129
AU 9726244	A1	19971106	AU 1997-26244	19970624
AU 713740	B2	19991209		
US 6232463	B1	20010515	US 1998-128508	19980804
PRIORITY APPLN. INFO.:				
			US 1993-159088	19931129
			US 1990-463358	19900111
			US 1990-566977	19900813
			US 1992-854634	19920701

AU 1993-38025 19930225
 WO 1994-US13622 19941129
 US 1997-948151 19971009

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

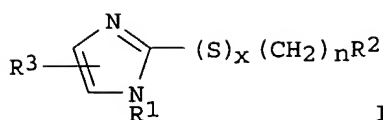
AB The invention presents novel purine-based compds. I [G = CH, N; X = NH₂, OH; Y = RQ, NHRQ; R = H, C2-20 hydrocarbonyl; Q = ≥ 1 reactive or non-reactive functionality; Z = H, N-protecting group, sugar moiety] for inclusion in oligonucleotides. I, when incorporated into oligonucleotides, are especially useful as "antisense" agents capable of specific hybridization with an RNA nucleotide sequence. Uses (no data) include treating diseases, regulating gene expression in exptl. systems, assaying for RNA and for RNA products, diagnosing diseases, modulating production of proteins, and site-specific cleavage of RNA. I include novel heterocyclic bases, nucleosides, and nucleotides. For example, reaction of 2-chloro-9-(2'-deoxy-β-D-erythro-pentofuranosyl)inosine [preparation given] reacted with 1-(3-aminopropyl)imidazole to give 67% guanosine intermediate II, which underwent a sequence of N2,3',5'-triacylation with isobutyryl chloride (77%), 6-O-etherification with p-O₂NC₆H₄CH₂CH₂OH by Mitsunobu reaction (96%), di-O-deacylation (81%), 5'-O-protection with 4,4'-dimethoxytrityl chloride (80%), and reaction with i-Pr₂NPClOCH₂CH₂CN (65%), to give title compound III (i.e. G'). When incorporated into the modified oligonucleotide CGACTATGCAAG'G'G'C, the G' residue increased T_m of its DNA hybrid by 2.8°/mod vs. wild. Prepns. of several addnl. I and T_m results for 18 modified oligonucleotide sequences are given.

L14 ANSWER 13 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

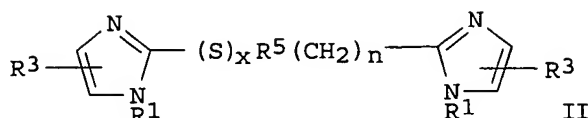
ACCESSION NUMBER: 124:74223 MARPAT
 TITLE: Electrolytic pretreatment of metallic surface for soldering in manufacturing electric circuits
 INVENTOR(S): Yamaguchi, Hideaki; Kato, Kazuhiko; Uo, Masaki; Matsumoto, Kichiji
 PATENT ASSIGNEE(S): Murata KK, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07243068	A2	19950919	JP 1994-73707	19940308
PRIORITY APPLN. INFO.:			JP 1994-73707	19940308

GI



I



II

AB The title process providing metallic surface with a protective coating film resisting against corrosion, moisture, heat, and chems. involves electrolytic treatment of the metallic surface with an aqueous solution containing 2-imidazolyl derivs. I or II (R1 = H, alkyl, phenylalkyl, aryl; R2 = alkyl, phenylalkyl, alkylphenyl, R4-substd. Ph, R4-substd. cycloparaffin; R3 = H, sulfonic acid, alkyl, Ph, phenylalkyl, alkylphenyl, halo; R4 = alkyl, phenylalkyl, alkylphenyl; R5 = bond, allylene; n = 0-17, x = 0,1). The pretreatment gives surface of metals such as elec. circuits an improved soldering wettability.

L14 ANSWER 14 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 124:73875 MARPAT
 TITLE: Solderability-improving surface protective agents for circuit boards
 INVENTOR(S): Yamaguchi, Hideaki
 PATENT ASSIGNEE(S): Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 15 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07202386	A2	19950804	JP 1993-348305	19931215
PRIORITY APPLN. INFO.:			JP 1993-348305	19931215
			JP 1993-209828	19930630
			JP 1993-209830	19930630

GI For diagram(s), see printed CA Issue.

AB The Cu circuit conductor is treated with a solution containing ≥ 1 imidazole derivative I or II for improving storage life and solderability, where R1 = H, alkyl, Ph alkyl, allyl; χ_1 = III; χ_2 = IV; $\chi_{1,2}$ = R2, V(m = 0-3), VI(m = 2-7, n = 0-7); R2 = alkyl, Ph alkyl; R3 = H, sulfone, Ph, halo; R4 = H, sulfone, alkyl, halo; R5 = H, alkyl, Ph alkyl, alkyl phenyl; R6 = alkyl; n = 0-17, unless otherwise noted.

L14 ANSWER 15 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 123:186922 MARPAT
 TITLE: Symmetrical and unsymmetrical polyalkylamine metal complexes for ligand extraction and generation
 INVENTOR(S): Smith, Kevin M.; Ciccone, Joseph P.; Ramana, N. Venkata
 PATENT ASSIGNEE(S): The Regents of the University of California, USA
 SOURCE: U.S., 50 pp. Cont.-in-part of U.S. Ser. No.

10/757148

558,516, abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

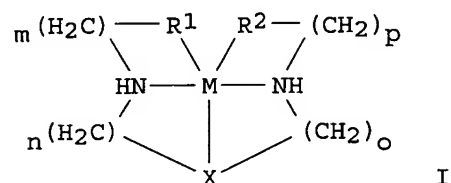
English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5410052	A	19950425	US 1990-587973	19900925
US 4959135	A	19900925	US 1989-306730	19890203
PRIORITY APPLN. INFO.:			US 1987-18891	19870225
			US 1989-306730	19890203
			US 1989-558516	19890731

GI



AB Methods and apparatus for the extraction of a ligand such as O₂ from a 1st fluid

environment and for release of a ligand such as O₂, as well as ligand carrier compds. therefore comprising linear, pentadentate polyalkylamines and transition metal ions. In the carrier compds. (I) each of R₁ and R₂ is independently an organic group including a S, an O or a N coordinated to M; each of m, n, o, and p is 1, 2, 3, or 4; X is selected from the group consisting of 2,6-pyridyl, 2,6-piperidyl, 2,5-pyrrolyl, 2,4-imidazolyl, substituted heterocyclic amines, etc.; and M is a transition metal ion. Data and preparation are reported for Co complexes only.

L14 ANSWER 16 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 123:99769 MARPAT

TITLE: Preflaxes for printed circuit boards

INVENTOR(S): Yamaguchi, Hideaki

PATENT ASSIGNEE(S): Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

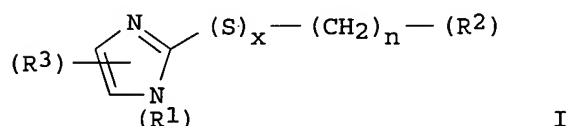
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06268356	A2	19940922	JP 1993-354691	19931221
PRIORITY APPLN. INFO.:			JP 1993-37247	19930118

AB Preflaxes containing organic and inorg. acids, metal compds., ion exchangers are deposited to form films which have excellent resistance against rust, moisture, and heat, and which improve reflow characteristics of cream solders.

L14 ANSWER 17 OF 23 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 123:72662 MARPAT
 TITLE: Protective coating materials on electroconductive metals such solders, electroless-plated solders, Ag, Ni, Zn, Cu, and Cu alloys.
 INVENTOR(S): Yamaguchi, Hideaki; Uo, Masaki; Kato, Kazuhiko; Matsumoto, Kichiji
 PATENT ASSIGNEE(S): Murata K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06299375	A2	19941025	JP 1993-354759	19931224
PRIORITY APPLN. INFO.:			JP 1993-67284	19930218

GI



AB The aqueous coating solns. contain imidazole derivs. I (R1 = H, alkyl, phenylalkyl, allyl; R2 = alkyl, phenylalkyl, substd. cycloaliph. derivs., substd. imidazole; R3 = H, sulfonyl, alkyl, Ph, halo; n = 0-17; x = 0-1). The solns. provide the surface of conductive metals with resistance against moisture, chems., heat, and corrosion.

L14 ANSWER 18 OF 23 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 122:68198 MARPAT
 TITLE: Silver halide photographic material with rapid processability and superior sharpness and storage stability
 INVENTOR(S): Kase, Akira
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06138570	A2	19940520	JP 1992-315807	19921029
PRIORITY APPLN. INFO.:			JP 1992-315807	19921029

AB The title photog. material has ≥ 1 emulsion layer containing AgCl(≥ 80 mol%)-containing AgCl(Br) or AgCl grains that has (111) plane $\geq 50\%$ of the total surface area and is formed in the presence of a specified N-containing heterocyclic derivative or thiourea derivative, and 1 of the emulsion layers or non-photosensitive layers is a colored layer.

L14 ANSWER 19 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 120:334774 MARPAT
 TITLE: Method for processing silver halide photographic material
 INVENTOR(S): Nakamura, Koichi; Yabuki, Yoshiharu
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 78 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 565023	A1	19931013	EP 1993-105601	19930405
EP 565023	B1	19980701		
R: DE, FR, GB, NL				
JP 05303185	A2	19931116	JP 1992-112377	19920406
JP 2958589	B2	19991006		
US 5380626	A	19950110	US 1993-42800	19930406
PRIORITY APPLN. INFO.:			JP 1992-112377	19920406

AB A method for forming an image in a Ag halide color photog. material comprising a support having thereon ≥ 1 light-sensitive Ag halide emulsion layer comprises image-wise exposing the Ag halide color photog. material, color developing the exposed material and then subjecting the developed material to a desilverization treatment, wherein the desilverization treatment is carried out using a processing solution having a bleaching ability and containing ≥ 1 of an amidine compound or a bisguanidine compound and a ferric salt of an organic acid. In another method processing is addnl. carried out in the presence of a stilbene fluorescent brightener using a desilverization bath containing 1 of an amidine compound or a bisguanidine compound. The method produces less stain and less wash liquid.

L14 ANSWER 20 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 119:237584 MARPAT
 TITLE: Organic nonlinear optical device containing aminoalkane in polymer matrix
 INVENTOR(S): Shigemoto, Takeo; Sugiyama, Tsunetoshi; Ukaji, Takashi
 PATENT ASSIGNEE(S): Japan Synthetic Rubber Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05080375	A2	19930402	JP 1991-269111	19910920
PRIORITY APPLN. INFO.:			JP 1991-269111	19910920

AB The device contains a compound $XCH_2CRHNHAr$ ($R = \text{alkyl, alkenyl, alkynyl, aryl, aralkyl}$; $Ar = \text{aromatic or heteroarom. ring}$; $X = \text{halo}$) bound with a polymer. (S)-1-chloro-2-(4-nitrophenyl)aminopropane shows high second harmonic generation.

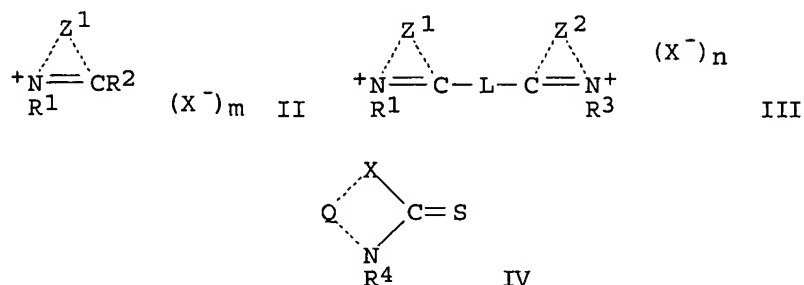
L14 ANSWER 21 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

10/757148

ACCESSION NUMBER: 116:265418 MARPAT
 TITLE: Package of photosensitive material
 INVENTOR(S): Shibahara, Yoshihiko
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 76 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 452811	A2	19911023	EP 1991-105765	19910411
EP 452811	A3	19911211		
EP 452811	B1	19960710		
R: DE, FR, GB, IT, NL				
JP 04003051	A2	19920108	JP 1990-104727	19900420
PRIORITY APPLN. INFO.:			JP 1990-104727	19900420

GI



AB A package contains a photosensitive material comprising a spool, a photog. film engaged with the spool at an end and rolled round the spool and a cartridge body, the whole photog. film being placed in the cartridge, in which the void volume $V = (B-A)/B$ [$A = (\text{film thickness}) + (\text{film length})$; $B = (\text{cross-sectional area of cartridge body}) - (\text{cross-sectional area of spool})$] is ≤ 0.25 , and the photog. film comprises ≥ 1 photosensitive Ag halide emulsion layer formed on a transparent support and contains a compound selected from Z-S-M (I), II, III, and IV ($M = \text{H, cation or S-Z}$; $Z = \text{heterocyclic residue}$; $\text{NZ}_{1,2} = \text{imidazole, pyridine, thiazole, selenazole}$; $\text{R}_{1,3} = \text{alkyl, alkenyl, aralkyl, aryl}$; $\text{r}_2 = \text{H, alkyl}$; $\text{R}_1\text{R}_2 = \text{cyclyl}$; $\text{L} = \text{divalent connecting group}$; $\text{X}_1 = \text{acid anion}$; $m = 0, 1$ and $n = 0-2$ with the proviso that when an inner salt is formed; $m = 0$ and $n = 1$ or 0 that the whole mol. will be elec. neutral; $\text{R}_4 = \text{alkyl, aralkyl, alkenyl, aryl, heterocyclyl}$; $\text{X} = \text{O, S, Se, NR}_4$; $\text{Q} = \text{atoms for forming a 5- or 6-membered heterocyclyl}$). With this package, the size and weight of camera can be decreased, and the photog. properties of the photosensitive material contained in the package are not easily deteriorated.

L14 ANSWER 22 OF 23 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 98:170401 MARPAT
 TITLE: Desensitizer compositions for pressure-sensitive copying materials
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

Searcher : Shears 571-272-2528

10/757148

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57070693	A2	19820501	JP 1980-148046	19801022
JP 01005556	B4	19890131		
US 4411699	A	19831025	US 1981-311812	19811016
DE 3141607	A1	19820805	DE 1981-3141607	19811020
GB 2090850	A	19820721	GB 1981-31763	19811021
GB 2090850	B2	19840426		

PRIORITY APPLN. INFO.: JP 1980-148046 19801022

GI For diagram(s), see printed CA Issue.

AB Desensitizer compns. for pressure-sensitive copying paper contain an amidine derivative of the formula I (R = H, alkyl, aryl; R1 = H, alkyl, aryl, amino, alkylthio; Z = C2-6 alkylene; R, R1, Z may contain substituent; when R and R1 are alkyl, then ≥ 1 of them is a substituted alkyl). Thus, rosin-modified maleic acid resin, ethylenediamine-propylene oxide adduct, II, and TiO₂ were mixed to give a high-quality desensitizer composition for pressure-sensitive copying paper.

L14 ANSWER 23 OF 23 MARPAT COPYRIGHT 2006 ACS on STN

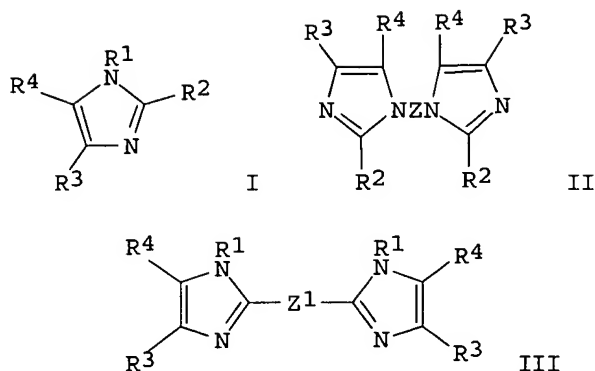
ACCESSION NUMBER: 97:101742 MARPAT
TITLE: Desensitizing compositions
INVENTOR(S): Sekikawa, Nobuyoshi; Iwakura, Ken; Miyamoto, Akio;
Satomura, Masato
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Ger. Offen., 24 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3141011	A1	19820519	DE 1981-3141011	19811015
JP 57069089	A2	19820427	JP 1980-145345	19801017
JP 63041751	B4	19880818		
GB 2088888	A	19820616	GB 1981-31330	19811016
GB 2088888	B2	19850612		
US 4411700	A	19831025	US 1981-311819	19811016

PRIORITY APPLN. INFO.: JP 1980-145345 19801017

GI



AB Desensitizing compns. for use with pressure-sensitive copying paper containing diphenylmethane-type compds. as color developers contain imidazole derivs. (I, II, or III; R1 = H, C1-20 alkyl, or aryl; R2 = H, C1-20 alkyl, aryl, amino, C1-20 alkylthio; R3, R4 = H, C1-4 alkyl, or aryl; Z, Z1 = a divalent group) as the desensitizing agents at 5 to 60 weight% of the total composition. Thus, a composition containing an ethylenediamine-propylene oxide addition product 40 and a colophony-denatured maleic acid resin 15 parts was heated at 170° for 1 h to dissolve the resin and then TiO₂ 20 and 2-methyl-1-phenylimidazole 20 parts were added to the solution. The resulting mixture was then ball-milled to give a desensitizing composition which was printed at 3.0 g/m² on a developer sheet. When this developer sheet was used with an appropriate color-former sheet, a color d. of 0.05 was obtained at an image pressure of 600 kg/cm². After storage of the developer sheet for 1 mo, a color d. of 0.05 was still obtained.

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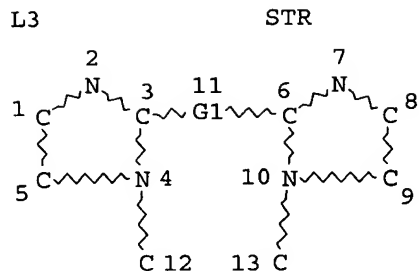
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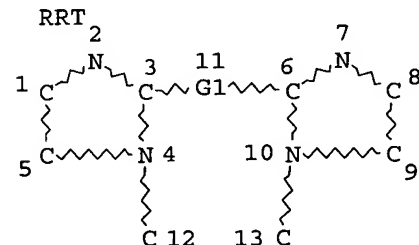
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CONNECT IS X2 RC AT 7
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 13

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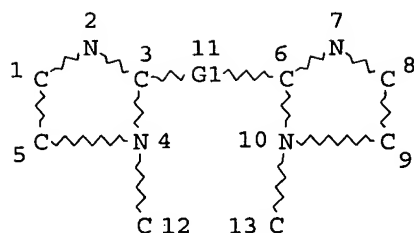
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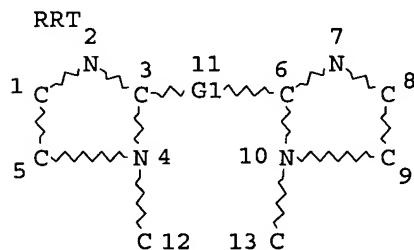
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GRAPH ATTRIBUTES:
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REP G1=(1-3) C
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GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 13

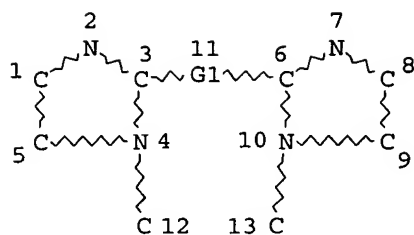
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L29 19 SEA (NICKEL OR NI)/NTE
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 Art Unit: 1026 Phone Number: 2-0707 Serial Number: 10/757-148
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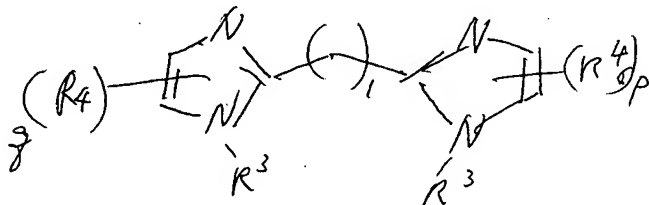
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For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

1. search cpd (i) of Nickel salt (see claims- sub 1)

* R^3, R^4 are sub

* 1 is 1 to 3

* p, q is 0 to 2

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